

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:SSSPTA1654MCG

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

***** Welcome to STN International *****

NEWS 1 Web Page for STN Seminar Schedule - N. America
NEWS 2 AUG 15 CAOLD to be discontinued on December 31, 2008
NEWS 3 OCT 07 EPFULL enhanced with full implementation of EPC2000
NEWS 4 OCT 07 Multiple databases enhanced for more flexible patent
number searching
NEWS 5 OCT 22 Current-awareness alert (SDI) setup and editing
enhanced
NEWS 6 OCT 22 WPIDS, WPINDEX, and WPIX enhanced with Canadian PCT
Applications
NEWS 7 OCT 24 CHEMLIST enhanced with intermediate list of
pre-registered REACH substances
NEWS 8 NOV 21 CAS patent coverage to include exemplified prophetic
substances identified in English-, French-, German-,
and Japanese-language basic patents from 2004-present
NEWS 9 NOV 26 MARPAT enhanced with FSORT command
NEWS 10 NOV 26 MEDLINE year-end processing temporarily halts
availability of new fully-indexed citations
NEWS 11 NOV 26 CHEMSAFE now available on STN Easy
NEWS 12 NOV 26 Two new SET commands increase convenience of STN
searching
NEWS 13 DEC 01 ChemPort single article sales feature unavailable

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

NEWS HOURS STN Operating Hours Plus Help Desk Availability
NEWS LOGIN Welcome Banner and News Items
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that
specific topic.

All use of STN is subject to the provisions of the STN Customer
agreement. Please note that this agreement limits use to scientific
research. Use for software development or design or implementation
of commercial gateways or other similar uses is prohibited and may
result in loss of user privileges and other penalties.

***** STN Columbus *****

FILE 'HOME' ENTERED AT 17:56:05 ON 02 DEC 2008

=> file registry
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE	TOTAL
ENTRY	SESSION
1.05	1.05

FILE 'REGISTRY' ENTERED AT 17:58:45 ON 02 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 30 NOV 2008 HIGHEST RN 1077629-73-2
DICTIONARY FILE UPDATES: 30 NOV 2008 HIGHEST RN 1077629-73-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

```
=> phscn/sqsp and sql<6
    47 PHSCN/SQSP
    174576 SQL<6
L1    47 PHSCN/SQSP AND SQL<6
```

=> file caplus	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	36.01	37.06

FILE 'CAPLUS' ENTERED AT 17:59:11 ON 02 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December
26, 1996), unless otherwise indicated in the original publications.
The CA Lexicon is the copyrighted intellectual property of the
American Chemical Society and is provided to assist you in searching
databases on STN. Any dissemination, distribution, copying, or storing
of this information, without the prior written consent of CAS, is
strictly prohibited.

FILE COVERS 1907 - 2 Dec 2008 VOL 149 ISS 23
FILE LAST UPDATED: 1 Dec 2008 (20081201/ED)

Caplus now includes complete International Patent Classification (IPC)
reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> 11

L2 21 L1

=> d ibib abs total 12

L2 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:1360637 CAPLUS

TITLE: Genetic polymorphisms associated with an increased risk of neurodegenerative disease and their detection and diagnostic and prophylactic use

INVENTOR(S): Grupe, Andrew; Li, Yonghong

PATENT ASSIGNEE(S): Applera Corporation, USA

SOURCE: PCT Int. Appl., 137pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008137110	A1	20081113	WO 2008-US5734	20080501
W:	AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
US 20080286796	A1	20081120	US 2008-151163	20080501
PRIORITY APPLN. INFO.:			US 2007-927864P	P 20070503
AB	The present invention is based on the discovery of genetic polymorphisms that are associated with neurodegenerative disease, particularly Alzheimer's disease and Parkinson's disease. In particular, the present invention relates to nucleic acid mols. containing the polymorphisms, variant proteins encoded by such nucleic acid mols., reagents for detecting the polymorphic nucleic acid mols. and proteins, and methods of using the nucleic acid and proteins as well as methods of using reagents for their detection. An anal. of genetic polymorphisms surrounding the NEDD9 gene is reported. Expression of the NEDD9 gene is lower in the hippocampus of Alzheimer's disease patients than in controls. A number of polymorphisms around the gene were shown to be associated with an increased risk of Alzheimer's disease.			
REFERENCE COUNT:	3	THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT		

L2 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:422798 CAPLUS

DOCUMENT NUMBER: 149:417042

TITLE: Pharmacology of the Novel Antiangiogenic Peptide ATN-161 (Ac-PHSCN-NH2): Observation of a U-Shaped Dose-Response Curve in Several Preclinical Models of Angiogenesis and Tumor Growth

AUTHOR(S): Donate, Fernando; Parry, Graham C.; Shaked, Yuval; Hensley, Harvey; Guan, Xiaojun; Beck, Ivy; Tel-Tsur, Ziva; Plunkett, Marian L.; Manuia, Mari; Shaw, David E.; Kerbel, Robert S.; Mazar, Andrew P.

CORPORATE SOURCE: Attenuon, LLC, San Diego, CA, 92121, USA
SOURCE: Clinical Cancer Research (2008), 14(7), 2137-2144
CODEN: CCREF4; ISSN: 1078-0432
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

AB PURPOSE: ATN-161 (Ac-PHSCN-NH2) is an integrin-binding peptide that is currently in phase II trials in cancer patients. This peptide has been shown to have antitumor activity in a number of different preclin. models. Exptl. Design: In this study, we examined the binding, biodistribution, and dose and biomarker response of ATN-161 in several animal models. RESULTS: ATN-161 bound to the β subunit of a number of different integrins implicated in tumor growth and progression, which depended on its cysteine thiol. The peptide had antiangiogenic activity in the Matrigel plug model, and this activity could be reversed by inhibitors of protein kinase A, an effector of $\alpha\beta 1$ -dependent angiogenesis. A labeled analog of ATN-161, ATN-453, localized to neovessels but not to preexisting vasculature in vivo. The half-life of the peptide when localized to a tumor was much longer than in plasma. Dose-response studies in the Matrigel plug model of angiogenesis or a Lewis lung carcinoma model of tumor growth showed a U-shaped dose-response curve with 1 to 10 mg/kg given thrice a week, being the optimal dose range of ATN-161. Two addnl. pharmacodynamic models of angiogenesis (dynamic contrast-enhanced magnetic resonance imaging and measurement of endothelial cell progenitors) also revealed U-shaped dose-response curves. CONCLUSIONS: The presence of a U-shaped dose-response curve presents a significant challenge to identifying a biol. active dose of ATN-161. However, the identification of biomarkers of angiogenesis that also exhibit this same U-shaped response should allow the translation of those biomarkers to the clinic, allowing them to be used to identify the active dose of ATN-161 in phase II studies.

REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2007:876134 CAPLUS

DOCUMENT NUMBER: 147:335950

TITLE: Angiogenesis blockade as a new therapeutic approach to experimental colitis

AUTHOR(S): Danese, Silvio; Sans, Miquel; Spencer, David M.; Beck, Ivy; Donate, Fernando; Plunkett, Marian L.; de la Motte, Carol; Redline, Raymond; Shaw, David E.; Levine, Alan D.; Mazar, Andrew P.; Fiocchi, Claudio

CORPORATE SOURCE: Division of Gastroenterology, Istituto Clinico

Humanitas, Milan, 20089, Italy

SOURCE: Gut (2007), 56(6), 855-862

CODEN: GUTTAK; ISSN: 0017-5749

PUBLISHER: BMJ Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: Neoangiogenesis is a critical component of chronic inflammatory disorders. Inhibition of angiogenesis is an effective treatment in animal models of inflammation, but has not been tested in exptl. colitis. Aim: To investigate the effect of ATN-161, an anti-angiogenic compound, on the course of exptl. murine colitis. Method: Interleukin 10-deficient (IL10-/-) mice and wild-type mice were kept in ultra-barrier facilities (UBF) or conventional housing, and used for exptl. conditions. Dextran sodium sulfate (DSS)-treated mice were used as a model of acute colitis. Mice were treated with ATN-161 or its scrambled peptide ATN-163. Mucosal neoangiogenesis and mean vascular d. (MVD) were assessed by CD31 staining. A Disease Activity Index (DAI) was determined, and the severity of colitis was determined by a histol. score. Colonic cytokine production was measured by

ELISA,

and lamina propria mononuclear cell proliferation by thymidine incorporation. Result: MVD increased in parallel with disease progression in IL10-/- mice kept in conventional housing, but not in IL10-/- mice kept in UBF. Angiogenesis also occurred in DSS-treated animals. IL10-/- mice with established disease treated with ATN-161, but not with ATN-163, showed a significant and progressive decrease in DAI. The histol. colitis score was significantly lower in ATN-161-treated mice than in scrambled peptide-treated mice. Inhibition of angiogenesis was confirmed by a significant decrease of MVD in ATN-161-treated mice than in ATN-163-treated mice. No therapeutic effects were observed in the DSS model of colitis. ATN-161 showed no direct immunomodulatory activity in vitro. Conclusion: Active angiogenesis occurs in the gut of IL10-/- and DSS-treated colitic mice and parallels disease progression. ATN-161 effectively decreases angiogenesis as well as clin. severity and histol. inflammation in IL10-/- mice but not in the DDS model of inflammatory bowel disease (IBD). The results provide the rational basis for considering anti-angiogenic strategies in the treatment of IBD in humans.

REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2007:18927 CAPLUS

DOCUMENT NUMBER: 147:163767

TITLE: Differential angiogenic regulation of experimental colitis

AUTHOR(S): Chidlow, John H., Jr.; Langston, Will; Greer, James J. M.; Ostanin, Dmitry; Abdelbaqi, Maisoun; Houghton, Jeffery; Senthilkumar, Annamalai; Shukla, Deepti; Mazar, Andrew P.; Grisham, Matthew B.; Kevil, Christopher G.

CORPORATE SOURCE: Department of Pathology, Louisiana State University Health Sciences Center-Shreveport, Shreveport, LA, USA

SOURCE: American Journal of Pathology (2006), 169(6), 2014-2030

CODEN: AJPA44; ISSN: 0002-9440

PUBLISHER: American Society for Investigative Pathology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Inflammatory bowel diseases (IBDs) are chronic inflammatory disorders of the intestinal tract with unknown multifactorial etiol. that, among other things, result in alteration and dysfunction of the intestinal microvasculature. Clin. observations of increased colon microvascular d. during IBD have been made. However, there have been no reports investigating the physiol. or pathol. importance of angiogenic stimulation during the development of intestinal inflammation. Here we report that the dextran sodium sulfate and CD4+CD45RBhigh T-cell transfer models of colitis stimulate angiogenesis that results in increased blood vessel d. concomitant with increased histopathol., suggesting that the neovasculature contributes to tissue damage during colitis. We also show that leukocyte infiltration is an obligatory requirement for the stimulation of angiogenesis. The angiogenic response during exptl. colitis was differentially regulated in that the production of various angiogenic mediators was diverse between the two models with only a small group of mols. being similarly controlled. Importantly, treatment with the anti-angiogenic agent thalidomide or ATN-161 significantly reduced angiogenic activity and associated tissue histopathol. during exptl. colitis. Our findings identify a direct pathol. link between angiogenesis and the development of exptl. colitis, representing a novel therapeutic target for IBD.

REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2006:1226181 CAPLUS
 DOCUMENT NUMBER: 146:20292
 TITLE: Treatment of inflammatory bowel disease (IBD) with anti-angiogenic compounds
 INVENTOR(S): Mazar, Andrew P.; Danese, Silvio; Fiocchi, Claudio
 PATENT ASSIGNEE(S): Attenuon LLC, USA
 SOURCE: PCT Int. Appl., 40pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124611	A1	20061123	WO 2006-US18463	20060512
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006247631	A1	20061123	AU 2006-247631	20060512
CA 2608332	A1	20061123	CA 2006-2608332	20060512
EP 1904078	A1	20080402	EP 2006-759695	20060512
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008540568	T	20081120	JP 2008-511414	20060512
KR 2008029963	A	20080403	KR 2007-729005	20071212
PRIORITY APPLN. INFO.:			US 2005-679977P	P 20050512
			WO 2006-US18463	W 20060512

OTHER SOURCE(S): MARPAT 146:20292

AB Inhibitors of angiogenesis are disclosed as being useful therapeutics for treating various aspects of inflammatory bowel disease, in particular Crohn's Disease. A method for decreasing the magnitude of intestinal inflammation or inflammatory infiltrate in bowel tissue, a method for lowering systemic or gut-associated levels of a proinflammatory cytokine in a subject, a method for reducing microvessel d. in fixed bowel tissue sections and a method for treating an inflammatory bowel disease are disclosed. Preferred agents to achieve the foregoing are pentapeptides that include Pro-His-Ser-Cys-Asn and variants or derivs. thereof.

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN
 ACCESSION NUMBER: 2006:968423 CAPLUS
 DOCUMENT NUMBER: 146:384
 TITLE: A non-RGD-based integrin binding peptide (ATN-161) blocks breast cancer growth and metastasis in vivo
 AUTHOR(S): Khalili, Parisa; Arakelian, Ani; Chen, Gaoping; Plunkett, Marian L.; Beck, Ivy; Parry, Graham C.; Donate, Fernando; Shaw, David E.; Mazar, Andrew P.; Rabbani, Shafaat A.
 CORPORATE SOURCE: Department of Medicine and Oncology, McGill University

SOURCE: Health Center, Montreal, QC, Can.
 Molecular Cancer Therapeutics (2006), 5(9), 2271-2280
 CODEN: MCTOCF; ISSN: 1535-7163
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Integrins are expressed by numerous tumor types including breast cancer, in which they play a crucial role in tumor growth and metastasis. In this study, the authors evaluated the ability of ATN-161 (Ac-PHSCN-NH2), a 5-mer capped peptide derived from the synergy region of fibronectin that binds to $\alpha 5 \beta 1$ and $\alpha v \beta 3$ in vitro, to block breast cancer growth and metastasis. Exptl. design: MDA-MB-231 human breast cancer cells were inoculated s.c. in the right flank, or cells transfected with green fluorescent protein (MDA-MB-231-GFP) were inoculated into the left ventricle of female BALB/c nu/nu mice, resulting in the development of skeletal metastasis. Animals were treated with vehicle alone or by i.v. infusion with ATN-161 (0.05-1 mg/kg thrice a week) for 10 wk. Tumor volume was determined at weekly intervals and tumor metastasis was evaluated by x-ray, microcomputed tomog., and histol. Tumors were harvested for histol. evaluation. Treatment with ATN-161 caused a significant dose-dependent decrease in tumor volume and either completely blocked or caused a marked decrease in the incidence and number of skeletal as well as soft tissue metastases. This was confirmed histol. as well as radiog. using x-ray and microcomputed tomog. Treatment with ATN-161 resulted in a significant decrease in the expression of phosphorylated mitogen-activated protein kinase, microvessel d., and cell proliferation in tumors grown in vivo. These studies show that ATN-161 can block breast cancer growth and metastasis, and provides a rationale for the clin. development of ATN-161 for the treatment of breast cancer.
 REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
 L2 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:796211 CAPLUS
 DOCUMENT NUMBER: 145:211347
 TITLE: Acid addition salts of Ac-PHSCN-NH2
 INVENTOR(S): Ternansky, Robert J.; Gladstone, Patricia L.; Mazar, Andrew P.; Allan, Amy L.
 PATENT ASSIGNEE(S): Attenuon, LLC, USA
 SOURCE: PCT Int. Appl., 54pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006084016	A1	20060810	WO 2006-US3658	20060201
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006210627	A1	20060810	AU 2006-210627	20060201

CA 2596357	A1	20060810	CA 2006-2596357	20060201
EP 1846437	A1	20071024	EP 2006-720137	20060201
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008528635	T	20080731	JP 2007-553383	20060201
KR 2007100411	A	20071010	KR 2007-719973	20070831
CN 101151273	A	20080326	CN 2006-80009847	20070926
US 20080261892	A1	20081023	US 2008-883584	20080626
PRIORITY APPLN. INFO.:			US 2005-649308P	P 20050201
			WO 2006-US3658	W 20060201

OTHER SOURCE(S): MARPAT 145:211347

AB The invention relates to acid addition salts of Ac-Pro-His-Ser-Cys-Asn-NH2 (Ac-PHSCN-NH2), including methods for their synthesis, pharmaceutical compns. containing them used to treat diseases associated with angiogenesis and aberrant vascularization, and methods of preventing degradation of Ac-PHSCN-NH2 by salt formation. Ac-PHSCN-NH2 was prepared by the solid-phase method and its stability in solution and the solid phase compared with that of its hydrochloric, methanesulfonic and nitric acid salts.

REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:791029 CAPLUS

DOCUMENT NUMBER: 145:235787

TITLE: Improved formulations of anti-angiogenic peptides
INVENTOR(S): Mazar, Andrew, P.; Heiati, Hashem; Schrier, Jay; Li, Ming; Harris, Scott

PATENT ASSIGNEE(S): Attenuon, LLC, USA
SOURCE: PCT Int. Appl., 37pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	-----
WO 2006083906	A2	20060810	WO 2006-US3461	20060201
WO 2006083906	A3	20061005		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
AU 2006210895	A1	20060810	AU 2006-210895	20060201
CA 2596255	A1	20060810	CA 2006-2596255	20060201
EP 1843779	A2	20071017	EP 2006-720021	20060201
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008528630	T	20080731	JP 2007-553365	20060201
KR 2007100832	A	20071011	KR 2007-719974	20070831
PRIORITY APPLN. INFO.:			US 2005-648391P	P 20050201
			WO 2006-US3461	W 20060201

AB Described herein are compns./formulations of the Cys-containing anti-angiogenic peptide Pro-His-Ser-Cys-Asn (preferably in its capped form as Ac-PHSCN-NH2) or acid addition salts thereof or analog thereof, that comprise at least one addnl. compound that stabilizes the peptide or analog against spontaneous tandem dimerization or higher oligomerization. Preferred formulations include an acidic buffer such as citrate, glycine as an excipient and bulking agent. Optional addnl. components of the formulation are a reducing agent, a non-thiol biocompatible anti-oxidant, a lyoprotectant (typically one or more sugars, one or more amino acids, one or more methylamine, one or more lyotropic salts, and/or one or more polyols). Also provided is an article of manufacture or kit comprising the formulation in solution or in lyophilized form. A method of inhibiting angiogenesis in a subject, comprising administering to the subject the peptide in the above formulation is also disclosed. Ac-Pro-His-Ser-Cys-Asn-NH2, TFA salt (140 mg, 0.197 mmol) was dissolved in 2 mL of water and Amberlyst A-26 (OH) resin (4.2 meq/g, 273 mg, 5.8 equiv) was added. The reaction mixture was stirred at room temperature for 5 min.

The aqueous solution was decanted, the resin was washed twice with distilled water, and the combined aqueous layers were lyophilized to afford 81 mg (69%) of Ac-PHSCN-NH2 as a fluffy, white solid 94% monomer, 6% dimer. Ac-PHSCN-NH2, 50 mg/mL, was formulated in solns. that included the 50mM citrate 50 mg mannitol, and 10 mg sucrose and lyophilized. Stability of various formulations of the peptide was studied.

L2 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:693594 CAPLUS

DOCUMENT NUMBER: 146:102

TITLE: Protein and peptide drugs to suppress tumor angiogenesis

AUTHOR(S): Ruegg, Curzio

CORPORATE SOURCE: Lausanne Cancer Center (LCC), Swiss Institute for Experimental Cancer Research (ISREC), Epalinges, CH-1006, Switz.

SOURCE: Delivery of Protein and Peptide Drugs in Cancer (2006) , 255-284. Editor(s): Torchilin, Vladimir P. Imperial College Press: London, UK. CODEN: 69IGVE; ISBN: 1-86094-627-5

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review describes the features of peptides, polypeptides or proteins classes and report in details the leading compds. of each class. An overview of proteins and peptides with antiangiogenic and antitumor activities is presented.

REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:507586 CAPLUS

DOCUMENT NUMBER: 145:448676

TITLE: Phase 1 trial of the antiangiogenic peptide ATN-161 (Ac-PHSCN-NH2), a beta integrin antagonist, in patients with solid tumors

AUTHOR(S): Cianfrocca, M. E.; Kimmel, K. A.; Gallo, J.; Cardoso, T.; Brown, M. M.; Hudes, G.; Lewis, N.; Weiner, L.; Lam, G. N.; Brown, S. C.; Shaw, D. E.; Mazar, A. P.; Cohen, R. B.

CORPORATE SOURCE: Fox Chase Cancer Center, Philadelphia, PA, 19111, USA

SOURCE: British Journal of Cancer (2006), 94(11), 1621-1626 CODEN: BJCAAI; ISSN: 0007-0920

PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English

AB To evaluate the toxicity, pharmacol. and biol. properties of ATN-161, a five -amino-acid peptide derived from the synergy region of fibronectin, adult patients with advanced solid tumors were enrolled in eight sequential dose cohorts (0.1-16 mg kg⁻¹), receiving ATN-161 administered as a 10-min infusion thrice weekly. Pharmacokinetic sampling of blood and urine over 7 h was performed on Day 1. Twenty-six patients received from 1 to 14 4-wk cycles of treatment. The total number of cycles administered to all patients was 86, without dose-limiting toxicities. At dose levels above 0.5 mg kg⁻¹, mean total clearance and volume of distribution showed dose-independent pharmacokinetics (PKs). At 8.0 and 16.0 mg kg⁻¹, clearance of ATN-161 was reduced, suggesting saturable PKs. Dose escalation was halted at 16 mg kg⁻¹ when drug exposure (area under the curve) exceeded that associated with efficacy in animal models. There were no objective responses. Six patients received more than four cycles of treatment (>112 days). Three patients received 10 or more cycles (>280 days). ATN-161 was well tolerated at all dose levels. Approx., 1/3 of the patients in the study manifested prolonged stable disease. These findings suggest that ATN-161 should be investigated further as an antiangiogenic and antimetastatic cancer agent alone or with chemotherapy.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:339703 CAPLUS

DOCUMENT NUMBER: 144:381976

TITLE: Anticancer compounds and methods

INVENTOR(S): Livant, Donna

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: U.S. Pat. Appl. Publ., 87 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060078535	A1	20060413	US 2004-964093	20041013
AU 2005295915	A1	20060427	AU 2005-295915	20051011
CA 2584030	A1	20060427	CA 2005-2584030	20051011
WO 2006044330	A2	20060427	WO 2005-US36442	20051011
WO 2006044330	A3	20060608		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, ME, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1809266	A2	20070725	EP 2005-803159	20051011
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				

JP 2008515975 T 20080515 JP 2007-536781 20051011
PRIORITY APPLN. INFO.: US 2004-964093 A 20041013
WO 2005-US36442 W 20051011

AB The present invention relates to the treatment of cancer, to the testing of cancer cells for their ability to invade tissues and cause metastases, and to the identification and use of drugs to inhibit tumor invasion and growth. In one embodiment, the present invention contemplates a composition comprising a dendrimer and at least one peptide comprising an amino acid sequence PHSCN attached to said dendrimer, wherein the dendrimer comprises branches. In one embodiment, the dendrimer comprises polylysine. In one embodiment, the composition further comprises a chemotherapeutic agent attached to the dendrimer. In one embodiment, the chemotherapeutic agent comprises methotrexate. In another embodiment, the chemotherapeutic agent comprises boron. In another embodiment, the chemotherapeutic agent comprises an antibody.

L2 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1266841 CAPLUS
DOCUMENT NUMBER: 144:439725
TITLE: Effect of physicochemical modification on the
biodistribution and tumor accumulation of HPMA
copolymers
AUTHOR(S): Lammers, Twan; Kuehnlein, Rainer; Kissel, Maria; Subr,
Vladimir; Etrych, Tomas; Pola, Robert; Pechar, Michal;
Ulbrich, Karel; Storm, Gert; Huber, Peter; Peschke,
Peter
CORPORATE SOURCE: Department of Innovative Cancer Diagnosis and Therapy,
Clinical Cooperation Unit Radiotherapeutic Oncology,
German Cancer Research Center, Heidelberg, 69120,
Germany
SOURCE: Journal of Controlled Release (2005), 110(1), 103-118
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Copolymers of N-(2-hydroxypropyl)methacrylamide (HPMA) are prototypic and well-characterized polymeric drug carriers that are being broadly implemented in the delivery of anticancer therapeutics. To better predict the in vivo potential of the copolymers and to describe the biodistributional consequences of functionalization, 13 physicochem. different HPMA copolymers were synthesized, varying in mol. weight and in the nature and amount of functional groups introduced. Upon radiolabeling, the copolymers were injected i.v., and their circulation kinetics, tissue distribution and tumor accumulation were monitored in rats bearing s.c. Dunning AT1 tumors. It was found that increasing the average mol. weight of

HPMA copolymers resulted in prolonged circulation times and in increased tumor concns. Conjugation of carboxyl and hydrazide groups, as well as introduction of spacer, drug and peptide moieties reduced the long-circulating properties of the copolymers and as a result, lower levels were found in tumors and in all organs other than kidney. Interestingly, however, in spite of the reduced (absolute) tumor concns., hardly any reduction in the relative levels localizing to tumors was found. Tumor-to-organ ratios were comparable to unmodified control for the majority of chemical modified copolymers, indicating that functionalization does not necessarily affect the tumor targeting ability of the copolymers and suggesting that HPMA copolymer-based drug delivery systems may prove to be attractive tools for more effectively treating various forms of advanced solid malignancy.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:303191 CAPLUS
 DOCUMENT NUMBER: 142:341966
 TITLE: Hydrogels used to deliver medicaments to the eye for the treatment of posterior segment diseases
 INVENTOR(S): Schultz, Clyde L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 821,718.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050074497	A1	20050407	US 2004-971997	20041022
US 20050208102	A1	20050922	US 2004-821718	20040409
US 20050255144	A1	20051117	US 2005-102454	20050409
WO 2005110473	A2	20051124	WO 2005-US12185	20050409
WO 2005110473	A3	20061123		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1755672	A2	20070228	EP 2005-778127	20050409

<-----User Break----->

=> d ibib abs total 12 hitseq

L2 ANSWER 1 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2008:1360637 CAPLUS
 TITLE: Genetic polymorphisms associated with an increased risk of neurodegenerative disease and their detection and diagnostic and prophylactic use
 INVENTOR(S): Grupe, Andrew; Li, Yonghong
 PATENT ASSIGNEE(S): Applera Corporation, USA
 SOURCE: PCT Int. Appl., 137pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008137110	A1	20081113	WO 2008-US5734	20080501
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LG, LN, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH,				

PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM,
 TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU,
 IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK,
 TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD,
 TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW,
 AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

US 20080286796 A1 20081120 US 2008-151163 20080501

PRIORITY APPLN. INFO.: US 2007-927864P P 20070503

AB The present invention is based on the discovery of genetic polymorphisms that are associated with neurodegenerative disease, particularly Alzheimer's disease and Parkinson's disease. In particular, the present invention relates to nucleic acid mols. containing the polymorphisms, variant proteins encoded by such nucleic acid mols., reagents for detecting the polymorphic nucleic acid mols. and proteins, and methods of using the nucleic acid and proteins as well as methods of using reagents for their detection. An anal. of genetic polymorphisms surrounding the NEDD9 gene is reported. Expression of the NEDD9 gene is lower in the hippocampus of Alzheimer's disease patients than in controls. A number of polymorphisms around the gene were shown to be associated with an increased risk of Alzheimer's disease.

IT INDEXING IN PROGRESS

IT 262438-43-7, ATN-161

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (in treatment of Alzheimer's disease; genetic polymorphisms associated with increased risk of neurodegenerative disease and their detection and diagnostic and prophylactic use)

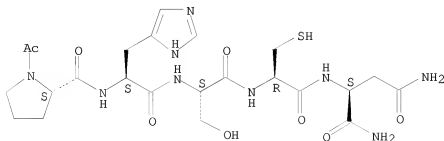
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 2 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2008:422798 CAPLUS

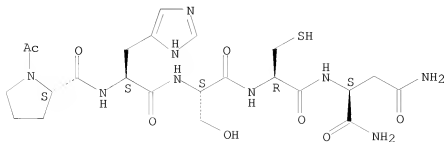
DOCUMENT NUMBER: 149:417042

TITLE: Pharmacology of the Novel Antiangiogenic Peptide ATN-161 (Ac-PHSCN-NH2): Observation of a U-Shaped Dose-Response Curve in Several Preclinical Models of Angiogenesis and Tumor Growth

AUTHOR(S): Donate, Fernando; Parry, Graham C.; Shaked, Yuval; Hensley, Harvey; Guan, Xiaojun; Beck, Ivy; Tel-Tsur, Ziva; Plunkett, Marian L.; Manuia, Mari; Shaw, David

CORPORATE SOURCE: E.; Kerbel, Robert S.; Mazar, Andrew P.
 SOURCE: Attenuon, LLC, San Diego, CA, 92121, USA
 Clinical Cancer Research (2008), 14(7), 2137-2144
 CODEN: CCRF4; ISSN: 1078-0432
 PUBLISHER: American Association for Cancer Research
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB PURPOSE: ATN-161 (Ac-PHSCN-NH2) is an integrin-binding peptide that is currently in phase II trials in cancer patients. This peptide has been shown to have antitumor activity in a number of different preclin. models. Exptl. Design: In this study, we examined the binding, biodistribution, and dose and biomarker response of ATN-161 in several animal models. RESULTS: ATN-161 bound to the β subunit of a number of different integrins implicated in tumor growth and progression, which depended on its cysteine thiol. The peptide had antiangiogenic activity in the Matrigel plug model, and this activity could be reversed by inhibitors of protein kinase A, an effector of $\alpha 5 \beta 1$ -dependent angiogenesis. A labeled analog of ATN-161, ATN-453, localized to neovessels but not to preexisting vasculature in vivo. The half-life of the peptide when localized to a tumor was much longer than in plasma. Dose-response studies in the Matrigel plug model of angiogenesis or a Lewis lung carcinoma model of tumor growth showed a U-shaped dose-response curve with 1 to 10 mg/kg given thrice a week, being the optimal dose range of ATN-161. Two addnl. pharmacodynamic models of angiogenesis (dynamic contrast-enhanced magnetic resonance imaging and measurement of endothelial cell progenitors) also revealed U-shaped dose-response curves. CONCLUSIONS: The presence of a U-shaped dose-response curve presents a significant challenge to identifying a biol. active dose of ATN-161. However, the identification of biomarkers of angiogenesis that also exhibit this same U-shaped response should allow the translation of those biomarkers to the clinic, allowing them to be used to identify the active dose of ATN-161 in phase II studies.
 IT 262438-43-7, ATN-161
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ATN-161 peptide bound to $\beta 1$ subunit of human venous and microvascular endothelial cell, inhibited angiogenesis and localized to neovessels in tumor of mouse model of matrigel plug)
 RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)
 NTE modified
 SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS

L2 ANSWER 3 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:876134 CAPLUS

DOCUMENT NUMBER: 147:335950

TITLE: Angiogenesis blockade as a new therapeutic approach to experimental colitis

AUTHOR(S): Danese, Silvio; Sans, Miquel; Spencer, David M.; Beck, Ivy; Donate, Fernando; Plunkett, Marian L.; de la Motte, Carol; Redline, Raymond; Shaw, David E.; Levine, Alan D.; Mazar, Andrew P.; Fiocchi, Claudio

CORPORATE SOURCE: Division of Gastroenterology, Istituto Clinico Humanitas, Milan, 20089, Italy

SOURCE: Gut (2007), 56(6), 855-862
CODEN: GUTTAK; ISSN: 0017-5749

PUBLISHER: BMJ Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Background: Neoangiogenesis is a critical component of chronic inflammatory disorders. Inhibition of angiogenesis is an effective treatment in animal models of inflammation, but has not been tested in exptl. colitis. Aim: To investigate the effect of ATN-161, an anti-angiogenic compound, on the course of exptl. murine colitis. Method: Interleukin 10-deficient (IL10-/-) mice and wild-type mice were kept in ultra-barrier facilities (UBF) or conventional housing, and used for exptl. conditions. Dextran sodium sulfate (DSS)-treated mice were used as a model of acute colitis. Mice were treated with ATN-161 or its scrambled peptide ATN-163. Mucosal neoangiogenesis and mean vascular d. (MVD) were assessed by CD31 staining. A Disease Activity Index (DAI) was determined, and the severity of colitis was determined by a histol. score. Colonic cytokine production was measured by

ELISA, and lamina propria mononuclear cell proliferation by thymidine incorporation. Result: MVD increased in parallel with disease progression in IL10-/- mice kept in conventional housing, but not in IL10-/- mice kept in UBF. Angiogenesis also occurred in DSS-treated animals. IL10-/- mice with established disease treated with ATN-161, but not with ATN-163, showed a significant and progressive decrease in DAI. The histol. colitis score was significantly lower in ATN-161-treated mice than in scrambled peptide-treated mice. Inhibition of angiogenesis was confirmed by a significant decrease of MVD in ATN-161-treated mice than in ATN-163-treated mice. No therapeutic effects were observed in the DSS model of colitis. ATN-161 showed no direct immunomodulatory activity in vitro. Conclusion: Active angiogenesis occurs in the gut of IL10-/- and DSS-treated colitic mice and parallels disease progression. ATN-161 effectively decreases angiogenesis as well as clin. severity and histol. inflammation in IL10-/- mice but not in the DDS model of inflammatory bowel disease (IBD). The results provide the rational basis for considering anti-angiogenic strategies in the treatment of IBD in humans.

IT 262438-43-7, ATN 161

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ATN-161 decreased angiogenesis, disease progression in interleukin-10 deficient colitis mouse but not in DSS-induced colitis mouse thus providing rational basis for considering anti-angiogenic strategy for treatment of human IBD)

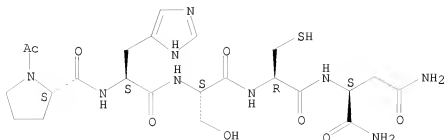
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 52 THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 4 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:18927 CAPLUS

DOCUMENT NUMBER: 147:163767

TITLE: Differential angiogenic regulation of experimental colitis

AUTHOR(S): Chidlow, John H., Jr.; Langston, Will; Greer, James J. M.; Ostanin, Dmitry; Abdelbaqi, Maisoun; Houghton, Jeffery; Senthilkumar, Annamalai; Shukla, Deepthi; Mazar, Andrew P.; Grisham, Matthew B.; Kevil, Christopher G.

CORPORATE SOURCE: Department of Pathology, Louisiana State University Health Sciences Center-Shreveport, Shreveport, LA, USA

SOURCE: American Journal of Pathology (2006), 169(6), 2014-2030

CODEN: AJPA44; ISSN: 0002-9440

PUBLISHER: American Society for Investigative Pathology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Inflammatory bowel diseases (IBDs) are chronic inflammatory disorders of the intestinal tract with unknown multifactorial etiol. that, among other things, result in alteration and dysfunction of the intestinal microvasculature. Clin. observations of increased colon microvascular d. during IBD have been made. However, there have been no reports investigating the physiol. or pathol. importance of angiogenic stimulation during the development of intestinal inflammation. Here we report that the dextran sodium sulfate and CD4⁺CD45^{RB}high T-cell transfer models of colitis stimulate angiogenesis that results in increased blood vessel d. concomitant with increased histopathol., suggesting that the neovasculature contributes to tissue damage during colitis. We also show that leukocyte infiltration is an obligatory requirement for the stimulation of angiogenesis. The angiogenic response during exptl. colitis was differentially regulated in that the production of various angiogenic mediators was diverse between the two models with only a small group of mols. being similarly controlled. Importantly, treatment with the anti-angiogenic agent thalidomide or ATN-161 significantly reduced angiogenic activity and associated tissue histopathol. during exptl. colitis. Our findings identify a direct pathol. link between angiogenesis and the development of exptl. colitis, representing a novel therapeutic target for IBD.

IT 262438-43-7, ATN-161

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

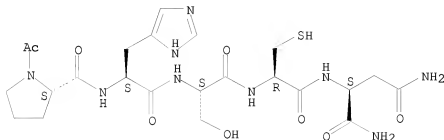
(differential angiogenic regulation and gene expression in exptl.

inflammatory bowel disease of DSS and CD4+CD45RBhigh T cell transfer
mouse models)
RN 262438-43-7 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 5 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:1226181 CAPLUS
DOCUMENT NUMBER: 146:20292
TITLE: Treatment of inflammatory bowel disease (IBD) with
anti-angiogenic compounds
INVENTOR(S): Mazar, Andrew P.; Danese, Silvio; Fiocchi, Claudio
PATENT ASSIGNEE(S): Attenuon LLC, USA
SOURCE: PCI Int. Appl., 40pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124611	A1	20061123	WO 2006-US18463	20060512
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006247631	A1	20061123	AU 2006-247631	20060512
CA 2608332	A1	20061123	CA 2006-2608332	20060512
EP 1904078	A1	20080402	EP 2006-759695	20060512
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,			

	BA, HR, MK, YU			
JP	2008540568	T	20081120	JP 2008-511414
KR	2008029963	A	20080403	KR 2007-729005
PRIORITY APPLN. INFO.:				US 2005-679977P
				WO 2006-US18463
				P 20050512
				W 20060512

OTHER SOURCE(S): MARPAT 146:20292

AB Inhibitors of angiogenesis are disclosed as being useful therapeutics for treating various aspects of inflammatory bowel disease, in particular Crohn's Disease. A method for decreasing the magnitude of intestinal inflammation or inflammatory infiltrate in bowel tissue, a method for lowering systemic or gut-associated levels of a proinflammatory cytokine in a subject, a method for reducing microvessel d. in fixed bowel tissue sections and a method for treating an inflammatory bowel disease are disclosed. Preferred agents to achieve the foregoing are pentapeptides that include Pro-His-Ser-Cys-Asn and variants or derivs. thereof.

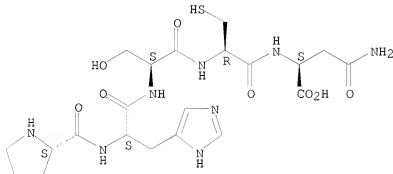
IT 252229-85-9 252229-85-9D, derivs. 262438-43-7,
ATN 161
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(treatment of inflammatory bowel disease with antiangiogenic compds.)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.

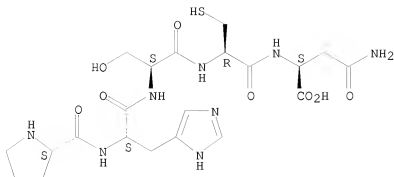


RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.

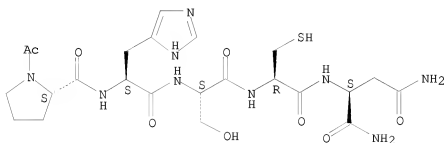


RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
 INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 6 OF 21 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2006:968423 CAPLUS

DOCUMENT NUMBER: 146:384

TITLE: A non-RGD-based integrin binding peptide (ATN-161)
 blocks breast cancer growth and metastasis in vivo
 AUTHOR(S): Khalili, Parisa; Arakelian, Ani; Chen, Gaoping;
 Plunkett, Marian L.; Beck, Ivy; Parry, Graham C.;
 Donate, Fernando; Shaw, David E.; Mazar, Andrew P.;
 Rabbani, Shafaat A.

CORPORATE SOURCE: Department of Medicine and Oncology, McGill University
 Health Center, Montreal, QC, Can.

SOURCE: Molecular Cancer Therapeutics (2006), 5(9), 2271-2280
 CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Integrins are expressed by numerous tumor types including breast cancer,
 in which they play a crucial role in tumor growth and metastasis. In this
 study, the authors evaluated the ability of ATN-161 (Ac-PHSCN-NH₂), a
 5-mer capped peptide derived from the synergy region of fibronectin that
 binds to α5β1 and αvβ3 in vitro, to block breast

cancer growth and metastasis. Exptl. design: MDA-MB-231 human breast cancer cells were inoculated s.c. in the right flank, or cells transfected with green fluorescent protein (MDA-MB-231-GFP) were inoculated into the left ventricle of female BALB/c nu/nu mice, resulting in the development of skeletal metastasis. Animals were treated with vehicle alone or by i.v. infusion with ATN-161 (0.05-1 mg/kg thrice a week) for 10 wk. Tumor volume was determined at weekly intervals and tumor metastasis was evaluated by x-ray, microcomputed tomog., and histol. Tumors were harvested for histol. evaluation. Treatment with ATN-161 caused a significant dose-dependent decrease in tumor volume and either completely blocked or caused a marked decrease in the incidence and number of skeletal as well as soft tissue metastases. This was confirmed histol. as well as radiog. using x-ray and microcomputed tomog. Treatment with ATN-161 resulted in a significant decrease in the expression of phosphorylated mitogen-activated protein kinase, microvessel d., and cell proliferation in tumors grown in vivo. These studies show that ATN-161 can block breast cancer growth and metastasis, and provides a rationale for the clin. development of ATN-161 for the treatment of breast cancer.

IT 262438-43-7, ATN-161

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(non-RGD-based integrin binding peptide (ATN-161) blocks breast cancer growth and metastasis in vivo)

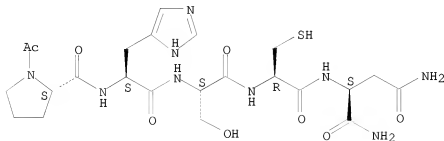
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 7 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:796211 CAPLUS

DOCUMENT NUMBER: 145:211347

TITLE: Acid addition salts of Ac-PHSCN-NH2

INVENTOR(S): Ternansky, Robert J.; Gladstone, Patricia L.; Mazar, Andrew P.; Allan, Amy L.

PATENT ASSIGNEE(S): Attenuon, LLC, USA

SOURCE: PCT Int. Appl., 54pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006084016	A1	20060810	WO 2006-US3658	20060201
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006210627	A1	20060810	AU 2006-210627	20060201
CA 2596357	A1	20060810	CA 2006-2596357	20060201
EP 1846437	A1	20071024	EP 2006-720137	20060201
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
JP 2008528635	T	20080731	JP 2007-553383	20060201
KR 2007100411	A	20071010	KR 2007-719973	20070831
CN 101151273	A	20080326	CN 2006-80009847	20070926
US 20080261892	A1	20081023	US 2008-883584	20080626
PRIORITY APPLN. INFO.:			US 2005-649308P	P 20050201
			WO 2006-US3658	W 20060201

OTHER SOURCE(S): MARPAT 145:211347

AB The invention relates to acid addition salts of Ac-Pro-His-Ser-Cys-Asn-NH₂ (Ac-PHSCN-NH₂), including methods for their synthesis, pharmaceutical compns. containing them used to treat diseases associated with angiogenesis and aberrant vascularization, and methods of preventing degradation of Ac-PHSCN-NH₂ by salt formation. Ac-PHSCN-NH₂ was prepared by the solid-phase method and its stability in solution and the solid phase compared with that of its hydrochloric, methanesulfonic and nitric acid salts.

IT 262438-43-7P 904763-27-5P 904763-42-4P
 904763-50-4P 904763-58-2P 904763-66-2P
 904763-74-2P 904763-82-2P 904763-90-2P
 904763-98-0P 904764-07-4P 904764-15-4P
 904764-22-3P 904764-30-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (preparation and stability of acetylprolylhistidylserylcysteinylaspartamide salts for use in treating diseases associated with angiogenesis and aberrant vascularization)

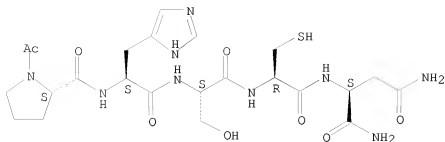
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



RN 904763-27-5 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
 mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

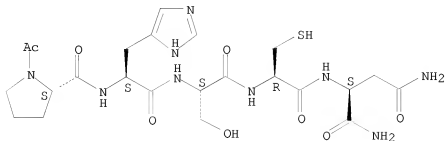
CM 1

CRN 262438-43-7
 CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 76-05-1
 CMF C2 H F3 O2



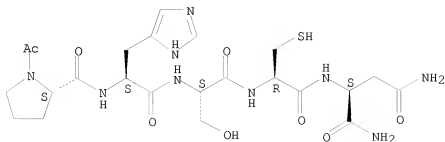
RN 904763-42-4 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,

monohydrochloride (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HCl

RN 904763-50-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

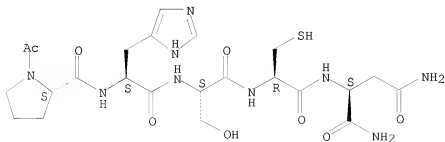
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 75-75-2

CMF C H4 O3 S



RN 904763-58-2 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
monoacetate (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

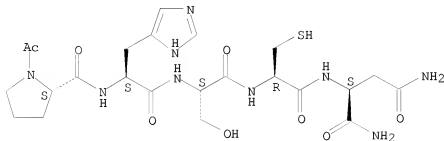
CM 1

CRN 262438-43-7
CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2



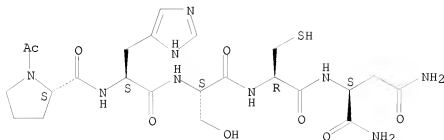
RN 904763-66-2 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(hydroxyacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

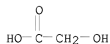
SEQ 1 PHSCN

CM 1
 CRN 262438-43-7
 CMF C23 H35 N9 O8 S
 NTE modified
 SEQ 1 PHSCN

Absolute stereochemistry.



CM 2
 CRN 79-14-1
 CMF C2 H4 O3

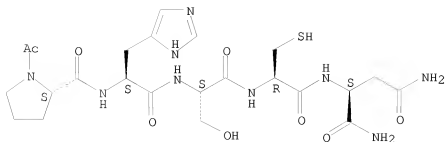


RN 904763-74-2 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, sulfate (1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified
 SEQ 1 PHSCN

CM 1
 CRN 262438-43-7
 CMF C23 H35 N9 O8 S
 NTE modified
 SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 904763-82-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono[(1S,4R)-7,7-dimethyl-2-oxobicyclo[2.2.1]heptane-1-methanesulfonate]
(salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

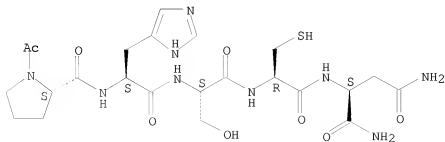
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

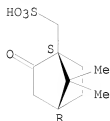


CM 2

CRN 3144-16-9

CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).



RN 904763-90-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(α -hydroxybenzeneacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

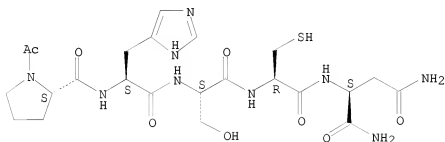
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 90-64-2

CMF C8 H8 O3



RN 904763-98-0 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteiny-,
 mono(2-hydroxybenzoate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

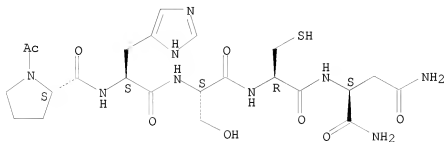
CM 1

CRN 262438-43-7
 CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 69-72-7
 CMF C7 H6 O3



RN 904764-07-4 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteiny-,
 butanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

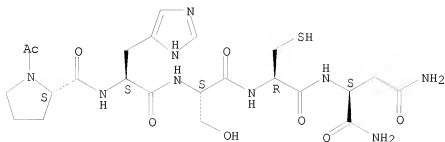
CM 1

CRN 262438-43-7
 CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 110-15-6

CMF C4 H6 O4

HO₂C-CH₂-CH₂-CO₂H

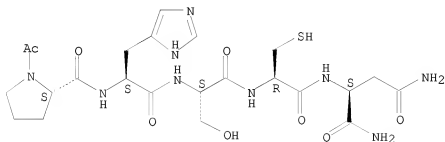
RN 904764-15-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
monohydrobromide (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HBr

RN 904764-22-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mononitrate (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

CM 2

CRN 7697-37-2

CMF H N O3



RN 904764-30-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
phosphate (1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

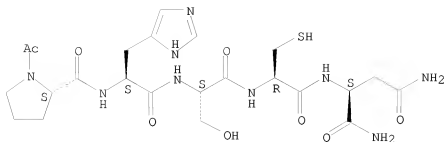
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 7664-38-2
CMF H3 O4 P



IT 252229-85-9

RL: PRP (Properties)

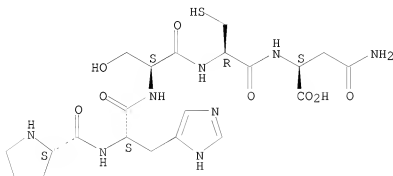
(unclaimed sequence; acid addition salts of Ac-PHSCN-NH2)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT:

3

THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 8 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:791029 CAPLUS

DOCUMENT NUMBER: 145:235787

TITLE: Improved formulations of anti-angiogenic peptides

INVENTOR(S): Mazar, Andrew, P.; Heiati, Hashem; Schrier, Jay; Li, Ming; Harris, Scott

PATENT ASSIGNEE(S): Attenuon, LLC, USA
 SOURCE: PCT Int. Appl., 37pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006083906	A2	20060810	WO 2006-US3461	20060201
WO 2006083906	A3	20061005		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006210895	A1	20060810	AU 2006-210895	20060201
CA 2596255	A1	20060810	CA 2006-2596255	20060201
EP 1843779	A2	20071017	EP 2006-720021	20060201
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
JP 2008528630	T	20080731	JP 2007-553365	20060201
KR 2007100832	A	20071011	KR 2007-719974	20070831
PRIORITY APPLN. INFO.:			US 2005-648391P	P 20050201
			WO 2006-US3461	W 20060201

AB Described herein are compns./formulations of the Cys-containing anti-angiogenic peptide Pro-His-Ser-Cys-Asn (preferably in its capped form as Ac-PHSCN-NH2) or acid addition salts thereof or analog thereof, that comprise at least one addnl. compound that stabilizes the peptide or analog against spontaneous tandem dimerization or higher oligomerization. Preferred formulations include an acidic buffer such as citrate, glycine as an excipient and bulking agent. Optional addnl. components of the formulation are a reducing agent, a non-thiol biocompatible anti-oxidant, a lyoprotectant (typically one or more sugars, one or more amino acids, one or more methylamine, one or more lyotropic salts, and/or one or more polyols). Also provided is an article of manufacture or kit comprising the formulation in solution or in lyophilized form. A method of inhibiting angiogenesis in a subject, comprising administering to the subject the peptide in the above formulation is also disclosed. Ac-Pro-His-Ser-Cys-Asn-NH2, TFA salt (140 mg, 0.197 mmol) was dissolved in 2 mL of water and Amberlyst A-26 (OH) resin (4.2 meq/g, 273 mg, 5.8 equiv) was added. The reaction mixture was stirred at room temperature for 5 min.

The aqueous solution was decanted, the resin was washed twice with distilled water, and

the combined aqueous layers were lyophilized to afford 81 mg (69%) of Ac-PHSCN-NH2 as a fluffy, white solid 94% monomer, 6% dimer. Ac-PHSCN-NH2, 50 mg/mL, was formulated in solns. that included the 50mM citrate 50 mg mannitol, and 10 mg sucrose and lyophilized. Stability of various formulations of the peptide was studied.

IT 262438-43-7P

REL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP

(Preparation); RACT (Reactant or reagent); USES (Uses)
(improved formulations of anti-angiogenic peptides)

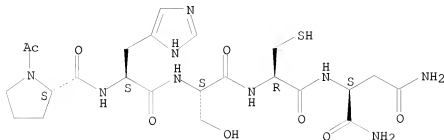
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 904763-42-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)

(improved formulations of anti-angiogenic peptides)

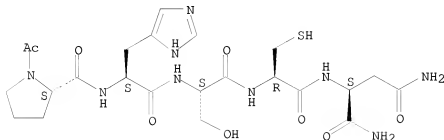
RN 904763-42-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
monohydrochloride (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HCl

IT 904763-27-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
(Reactant or reagent)

(improved formulations of anti-angiogenic peptides)

RN 904763-27-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

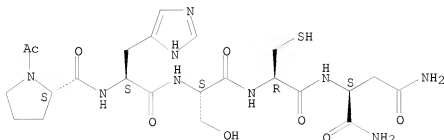
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



L2 ANSWER 9 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:693594 CAPLUS

DOCUMENT NUMBER: 146:102

TITLE: Protein and peptide drugs to suppress tumor angiogenesis

AUTHOR(S): Ruegg, Curzio

CORPORATE SOURCE: Lausanne Cancer Center (LCC), Swiss Institute for Experimental Cancer Research (ISREC), Epalinges, CH-1006, Switz.

SOURCE: Delivery of Protein and Peptide Drugs in Cancer (2006), 255-284. Editor(s): Torchilin, Vladimir P. Imperial College Press: London, UK. CODEN: 69IGVE; ISBN: 1-86094-627-5

DOCUMENT TYPE: Conference; General Review

LANGUAGE: English

AB A review describes the features of peptides, polypeptides or proteins classes and report in details the leading compds. of each class. An overview of proteins and peptides with antiangiogenic and antitumor activities is presented.

IT 262438-43-7, ATN-161
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (protein and peptide drugs such as ATN-161 with antitumor and antiangiogenic activity might be useful therapeutic option for treatment of human cancer)

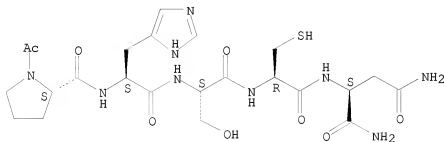
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 10 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:507586 CAPLUS

DOCUMENT NUMBER: 145:448676

TITLE: Phase 1 trial of the antiangiogenic peptide ATN-161 (Ac-PHSCN-NH2), a beta integrin antagonist, in patients with solid tumors

AUTHOR(S): Cianfrocca, M. E.; Kimmel, K. A.; Gallo, J.; Cardoso, T.; Brown, M. M.; Hudes, G.; Lewis, N.; Weiner, L.; Lam, G. N.; Brown, S. C.; Shaw, D. E.; Mazar, A. P.; Cohen, R. B.

CORPORATE SOURCE: Fox Chase Cancer Center, Philadelphia, PA, 19111, USA

SOURCE: British Journal of Cancer (2006), 94(11), 1621-1626

CODEN: BJCAAI; ISSN: 0007-0920

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To evaluate the toxicity, pharmacol. and biol. properties of ATN-161, a five -amino-acid peptide derived from the synergy region of fibronectin, adult patients with advanced solid tumors were enrolled in eight sequential dose cohorts (0.1-16 mg kg⁻¹), receiving ATN-161 administered as a 10-min infusion thrice weekly. Pharmacokinetic sampling of blood and urine over 7 h was performed on Day 1. Twenty-six patients received from 1 to 14 4-wk cycles of treatment. The total number of cycles administered to all patients was 86, without dose-limiting toxicities. At dose levels above 0.5 mg kg⁻¹, mean total clearance and volume of distribution showed

dose-independent pharmacokinetics (PKs). At 8.0 and 16.0 mg kg⁻¹, clearance of ATN-161 was reduced, suggesting saturable PKs. Dose escalation was halted at 16 mg kg⁻¹ when drug exposure (area under the curve) exceeded that associated with efficacy in animal models. There were no objective responses. Six patients received more than four cycles of treatment (>112 days). Three patients received 10 or more cycles (≥280 days). ATN-161 was well tolerated at all dose levels. Approx., 1/3 of the patients in the study manifested prolonged stable disease. These findings suggest that ATN-161 should be investigated further as an antiangiogenic and antimetastatic cancer agent alone or with chemotherapy.

IT 262438-43-7, ATN-161

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(antiangiogenic peptide ATN-161 was well tolerated, showed rapid clearance from plasma and Vss indicating high tissue distribution, very short half life but suppressed tumor growth with no objective clin. response in solid tumor patient)

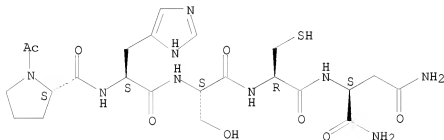
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 11 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:339703 CAPLUS

DOCUMENT NUMBER: 144:381976

TITLE: Anticancer compounds and methods

INVENTOR(S): Livant, Donna

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: U.S. Pat. Appl. Publ., 87 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

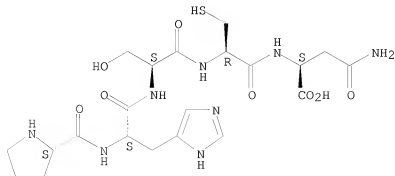
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060078535	A1	20060413	US 2004-964093	20041013
AU 2005295915	A1	20060427	AU 2005-295915	20051011
CA 2584030	A1	20060427	CA 2005-2584030	20051011

WO 2006044330 A2 20060427 WO 2005-US36442 20051011
 WO 2006044330 A3 20060608
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 EP 1809266 A2 20070725 EP 2005-803159 20051011
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU
 JP 2008515975 T 20080515 JP 2007-536781 20051011
 PRIORITY APPLN. INFO.: US 2004-964093 A 20041013
 WO 2005-US36442 W 20051011
 AB The present invention relates to the treatment of cancer, to the testing of cancer cells for their ability to invade tissues and cause metastases, and to the identification and use of drugs to inhibit tumor invasion and growth. In one embodiment, the present invention contemplates a composition comprising a dendrimer and at least one peptide comprising an amino acid sequence PHSCN attached to said dendrimer, wherein the dendrimer comprises branches. In one embodiment, the dendrimer comprises polylysine. In one embodiment, the composition further comprises a chemotherapeutic agent attached to the dendrimer. In one embodiment, the chemotherapeutic agent comprises methotrexate. In another embodiment, the chemotherapeutic agent comprises boron. In another embodiment, the chemotherapeutic agent comprises an antibody.
 IT 252229-9D, conjugates with dendrimers and chemotherapeutic agents
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anticancer compds. and methods using dendrimers and peptides and attached chemotherapeutic agents)
 RN 252229-85-9 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
(Biological study); USES (Uses)
(metastasis inhibition by; anticancer compds. and methods using
dendrimers and peptides and attached chemotherapeutic agents

IT 252229-85-9

RL: PRP (Properties)

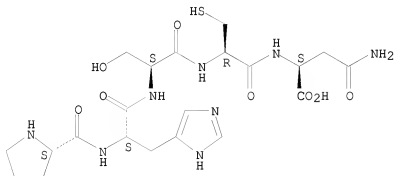
(unclaimed sequence; anticancer compds. and methods)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 12 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1266841 CAPLUS

DOCUMENT NUMBER: 144:439725

TITLE: Effect of physicochemical modification on the
biodistribution and tumor accumulation of HPMa
copolymers

AUTHOR(S): Lammers, Twan; Kuehnlein, Rainer; Kissel, Maria; Subr,
Vladimir; Etrych, Tomas; Pola, Robert; Pechar, Michal;
Ulbrich, Karel; Storm, Gert; Huber, Peter; Peschke,
Peter

CORPORATE SOURCE: Department of Innovative Cancer Diagnosis and Therapy,
Clinical Cooperation Unit Radiotherapeutic Oncology,
German Cancer Research Center, Heidelberg, 69120,
Germany

SOURCE: Journal of Controlled Release (2005), 110(1), 103-118
CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Copolymers of N-(2-hydroxypropyl)methacrylamide (HPMA) are prototypic and
well-characterized polymeric drug carriers that are being broadly
implemented in the delivery of anticancer therapeutics. To better predict
the in vivo potential of the copolymers and to describe the
biodistributional consequences of functionalization, 13 physicochem.
different HPMA copolymers were synthesized, varying in mol. weight and in the
nature and amount of functional groups introduced. Upon radiolabeling, the
copolymers were injected i.v., and their circulation kinetics, tissue
distribution and tumor accumulation were monitored in rats bearing s.c.
Dunning AT1 tumors. It was found that increasing the average mol. weight of

HPMA copolymers resulted in prolonged circulation times and in increased tumor

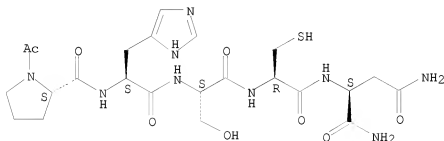
concns. Conjugation of carboxyl and hydrazide groups, as well as introduction of spacer, drug and peptide moieties reduced the long-circulating properties of the copolymers and as a result, lower levels were found in tumors and in all organs other than kidney. Interestingly, however, in spite of the reduced (absolute) tumor concns., hardly any reduction in the relative levels localizing to tumors was found. Tumor-to-organ ratios were comparable to unmodified control for the majority of chemical modified copolymers, indicating that functionalization does not necessarily affect the tumor targeting ability of the copolymers and suggesting that HPMA copolymer-based drug delivery systems may prove to be attractive tools for more effectively treating various forms of advanced solid malignancy.

IT 262438-43-7D, reaction products with hydroxypropylacrylamide polymers
 RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of physicochem. modification on biodistribution and tumor accumulation of HPMA copolymers)
 RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 13 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:303191 CAPLUS
 DOCUMENT NUMBER: 142:341966
 TITLE: Hydrogels used to deliver medicaments to the eye for the treatment of posterior segment diseases
 INVENTOR(S): Schultz, Clyde L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 821,718.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050074497	A1	20050407	US 2004-971997	20041022

US 20050208102	A1	20050922	US 2004-821718	20040409
US 20050255144	A1	20051117	US 2005-102454	20050409
WO 2005110473	A2	20051124	WO 2005-US12185	20050409
WO 2005110473	A3	20061123		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

EP 1755672	A2	20070228	EP 2005-778127	20050409
------------	----	----------	----------------	----------

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU

CN 1946352	A	20070411	CN 2005-80012215	20050409
IN 2006CN03687	A	20070112	IN 2006-CN3687	20061006

PRIORITY APPLN. INFO.: US 2003-461354P P 20030409
US 2004-821718 A2 20040409
US 2004-971997 A2 20041022
WO 2005-US12185 W 20050409

AB This invention provides a polymeric drug delivery system including a hydrogel containing one or more drugs for the treatment of a posterior segment disease. Exemplary drugs are anti-angiogenesis compds. for the treatment of macular degeneration. Allowing passive transference of this drug from a dilute solution into the hydrogel produces the delivery system. The hydrogel, when placed in contact with the eye, delivers the drug. The delivery of the drug is sustained over an extended period of time, which is of particular utility in the eye, which is periodically flushed with tears. This sustained delivery accelerates the treatment process while avoiding potential damaging effects of localized delivery of high concns. of compds., e.g., from eye drops.

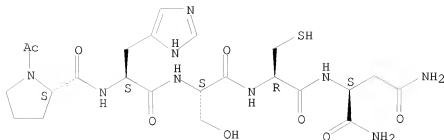
IT 262438-43-7, ATN-161
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(hydrogels containing drugs for treatment of eye diseases in posterior segment)

RN 262438-43-7 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 14 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:610128 CAPLUS

DOCUMENT NUMBER: 141:157478

TITLE: Peptides which target tumor and endothelial cells, compositions and uses thereof

INVENTOR(S): Allan, Amy L.; Yoon, Won Hyung; Gladstone, Patricia L.; Ternansky, Robert J.; Parry, Graham; Donate, Fernando; Mazar, Andrew

PATENT ASSIGNEE(S): Attenuon, Llc, USA

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063213	A2	20040729	WO 2003-US37895	20031125
WO 2004063213	A3	20050303		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2506813	A1	20040729	CA 2003-2506813	20031125
AU 2003298726	A1	20040810	AU 2003-298726	20031125
US 20040162239	A1	20040819	US 2003-723144	20031125
US 20050020810	A1	20050127	US 2003-722843	20031125
EP 1569678	A2	20050907	EP 2003-796483	20031125
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003016550	A	20051004	BR 2003-16550	20031125
CN 1741808	A	20060301	CN 2003-80109204	20031125
CN 1741809	A	20060301	CN 2003-80109205	20031125
JP 2006515866	T	20060608	JP 2005-512876	20031125
NZ 540363	A	20071130	NZ 2003-540363	20031125
MX 2005PA05545	A	20051018	MX 2005-PA5545	20050525
NO 2005003112	A	20050805	NO 2005-3112	20050624
IN 2005KN01228	A	20070126	IN 2005-KN1228	20050624
PRIORITY APPLN. INFO.:			US 2002-429174P	P 20021125
			US 2003-475539P	P 20030602
			WO 2003-US37895	W 20031125

OTHER SOURCE(S): MARPAT 141:157478

AB The invention relates generally to peptide analogs of Ac-PHSCN-NH₂ which target tumor and endothelial cells and have antitumor, antiangiogenic and antimetastatic activity and to methods for their synthesis and use in pharmaceutical compns. for treating, preventing and detecting diseases characterized by tumor growth, metastasis and angiogenesis. The peptide analogs may serve, inter alia, as carriers of radioactivity, PET-active compds., toxins, fluorescent mols. and PEG mols. Peptides
R1[(NHCHR2CO)0-1(X1)0-100]m-X2-X3-X4-X5-X6-[(X7)0-1]nNR4R5
[R1 is (un)substituted acyl, alkyl, cycloalkyl or imino, or acyl chelate; R2 is substituted alkyl; R4, R5 are (un)substituted alkyl; X1, X7 are NH(CH:CH)1-6CO, NH(CH2)1-6CO, NHCHMeCO; X2-X6 are α-amino acids which are defined; m, n are 0 or 1, with the proviso that R1 is not acetyl when R4 and R5 are H and m and n are 0] are claimed. Thus, Ac-Pro-His-Ser-Cys(Ac)-Asn-OH was prepared by the solid-phase method and coupled to doxorubicin hydrochloride to afford the conjugate.

IT 262438-43-7DP, analogs 729594-61-0P 729594-62-1P
729594-71-2P 729594-72-3P 729594-82-5P
729594-85-8P 731003-01-3DP, Indium complexes
731003-01-3P
RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of peptides which target tumor and endothelial cells)

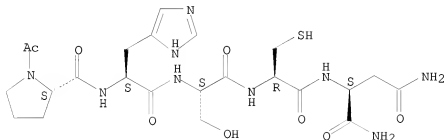
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



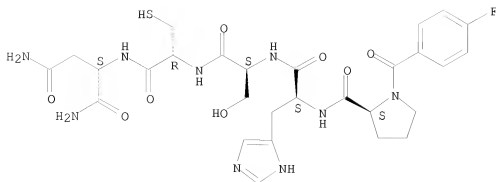
RN 729594-61-0 CAPLUS

CN L-Aspartamide, 1-(4-fluorobenzoyl)-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



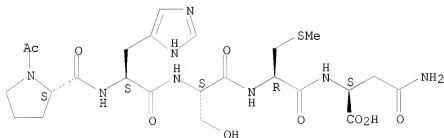
RN 729594-62-1 CAPLUS

CN L-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-methyl-L-cysteinyl-
(9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



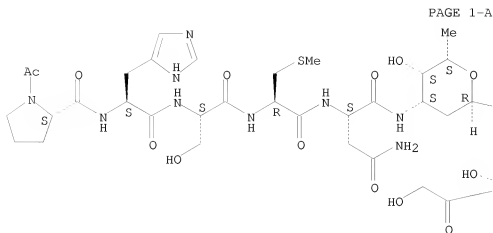
RN 729594-71-2 CAPLUS

CN 5,12-Naphthacenedione, 10-[[3-[(1-acetyl-L-prolyl-L-histidyl-L-seryl-S-methyl-L-cysteinyl-L-asparaginyl)amino]-2,3,6-trideoxy-α-L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)

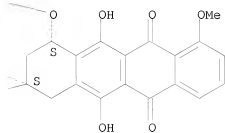
NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



PAGE 1-B



RN 729594-72-3 CAPLUS
 CN 5,12-Naphthacenedione, 10-[[3-[(1-acetyl-L-prolyl-L-histidyl-L-seryl-S-acetyl-L-cysteinyl-L-asparaginyl)amino]-2,3,6-trideoxy- α -L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

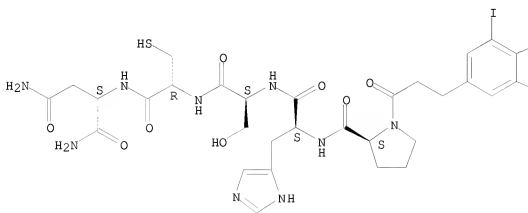
OH

RN 729594-85-8 CAPLUS
 CN L-Aspartamide, 1-[3-(4-hydroxy-3,5-diiodophenyl)-1-oxopropyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



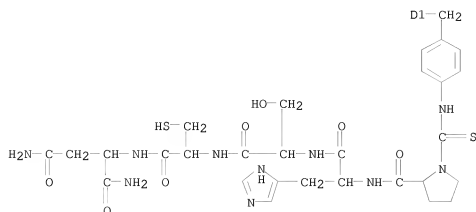
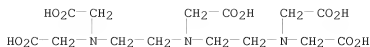
OH

I

RN 731003-01-3 CAPLUS
 CN L-Aspartamide, 1-[[[(4-methylphenyl)amino]thioxomethyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono[N,N-bis[2-bis(carboxymethyl)amino]ethylglycine] deriv. (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

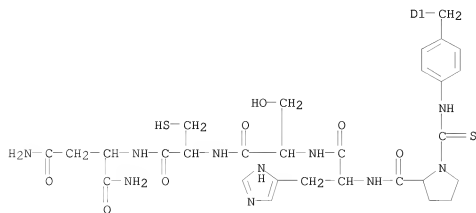
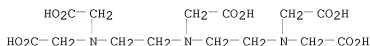
SEQ 1 PHSCN



RN 731003-01-3 CAPLUS
 CN L-Aspartamide, 1-[[[(4-methylphenyl)amino]thioxomethyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono[N,N-bis[2-[bis(carboxymethyl)amino]ethyl]glycine] deriv. (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 PHSCN



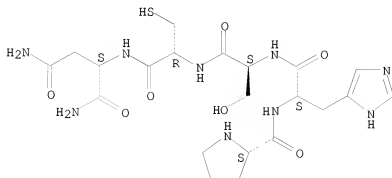
IT 729595-16-8D, resin-bound 729595-17-9
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (preparation of peptides which target tumor and endothelial cells)
 RN 729595-16-8 CAPLUS

CN L-Aspartamide, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



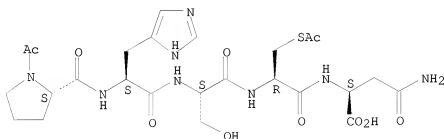
RN 729595-17-9 CAPLUS

CN L-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-acetyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 15 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:467702 CAPLUS

DOCUMENT NUMBER: 141:33798

TITLE: Peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, their preparation, and compositions and therapeutic uses thereof

INVENTOR(S): Allan, Amy L.; Donate, Fernando; Hopkins, Stephanie A.; Gladstone, Patricia L.; Mazar, Andrew; O'Hare, Sean M.; Parry, Graham; Plunkett, Marian L.; Ternansky, Robert J.; Yoon, Won Hyung

PATENT ASSIGNEE(S): Attenuon, LLC, USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047771	A2	20040610	WO 2003-US38175	20031125
WO 2004047771	A3	20050915		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2507045	A1	20040610	CA 2003-2507045	20031125
AU 2003297609	A1	20040618	AU 2003-297609	20031125
US 20040162239	A1	20040819	US 2003-723144	20031125
US 20050020810	A1	20050127	US 2003-722843	20031125
BR 2003016523	A	20051018	BR 2003-16523	20031125
EP 1594521	A2	20051116	EP 2003-812058	20031125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1741808	A	20060301	CN 2003-80109204	20031125
CN 1741809	A	20060301	CN 2003-80109205	20031125
JP 2006514116	T	20060427	JP 2005-510345	20031125
MX 2005PA05469	A	20050908	MX 2005-PA5469	20050523
NO 2005003111	A	20050824	NO 2005-3111	20050624
IN 2005KN01227	A	20060630	IN 2005-KN1227	20050624
PRIORITY APPLN. INFO.:				
			US 2002-429174P	P 20021125
			US 2003-475539P	P 20030602
			WO 2003-US38175	W 20031125

OTHER SOURCE(S): MARPAT 141:33798

AB The invention discloses peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, as well as methods of making the peptides, pharmaceutical compns. containing the peptides, and methods of using the peptides and pharmaceutical compns. to treat diseases associated with aberrant vascularization, e.g. cancer.

IT 701200-82-0P 701201-01-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
 (peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

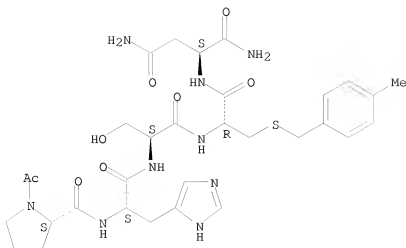
RN 701200-82-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methylphenyl)methyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

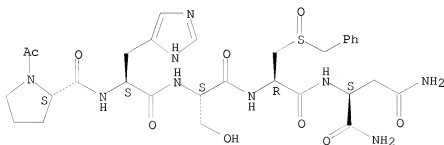


RN 701201-01-6 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-
 [(phenylmethyl)sulfinyl]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 701200-81-9P 701200-88-6P 701200-90-0P
 701200-91-1P 701200-92-2P 701200-93-3P
 701200-99-9P 701201-02-7P 701201-03-8P
 701201-04-9P 701201-05-0P 701201-06-1P
 701201-07-2P 701201-08-3P 701201-09-4P
 701201-10-7P 701201-11-8P 701201-12-9P
 701201-13-0P

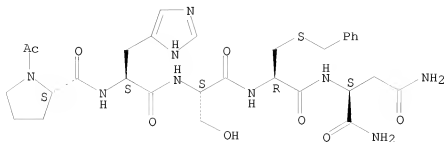
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
 (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
 (Uses)
 (peptide inhibitors of angiogenesis, cell migration, cell invasion and
 cell proliferation, preparation, and comps. and therapeutic uses)

RN 701200-81-9 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(phenylmethyl)-L-
 cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



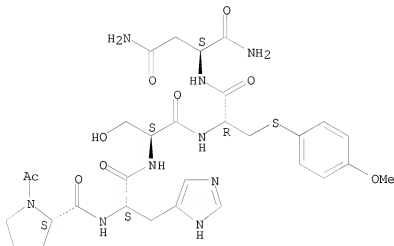
RN 701200-88-6 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(4-methoxyphenyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



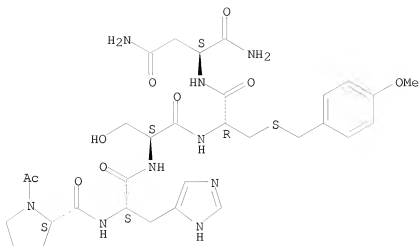
RN 701200-90-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



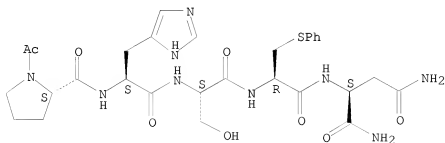
RN 701200-91-1 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-phenyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



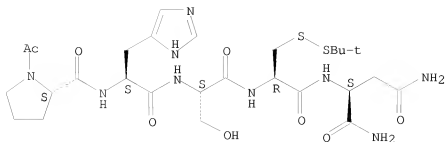
RN 701200-92-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-[(1,1-dimethylethyl)dithio]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



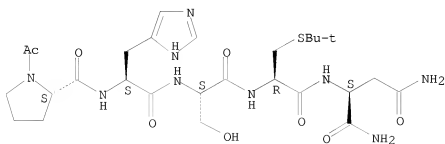
RN 701200-93-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(1,1-dimethylethyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



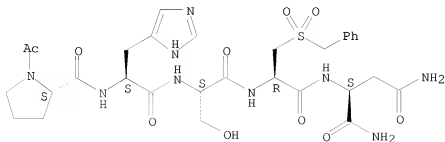
RN 701200-99-9 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-[(phenylmethyl)sulfonyl]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



RN 701201-02-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-benzoyl-L-cysteinyl- (9CI) (CA INDEX NAME)

SEQ 1 PHSCN

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(phenylthio)acetyl]-
L-cysteinyl- (9CI) (CA INDEX NAME)

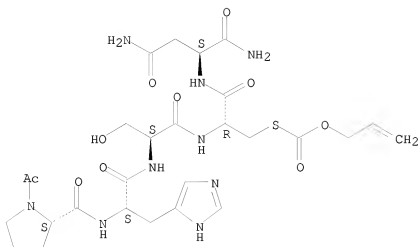
SEQ 1 PHSCN

Chemical structure of compound 10, showing a complex molecule with a pyrrolidine ring, an amide, a thioether, a pyridine ring, a hydroxyl group, a thioether, a carbonyl group, a thioether, a carbonyl group, a thioether, a carbonyl group, and a thioether.

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(2-propenyloxy)carbonyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.

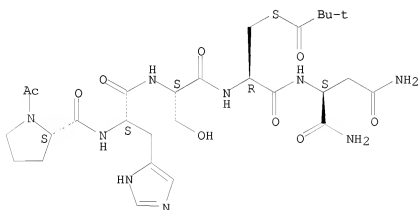


RN 701201-05-0 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2,2-dimethyl-1-oxopropyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

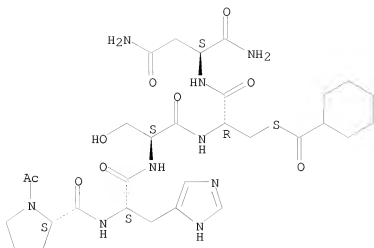


RN 701201-06-1 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(cyclohexylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



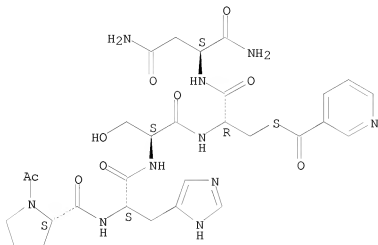
RN 701201-07-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(3-pyridinylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



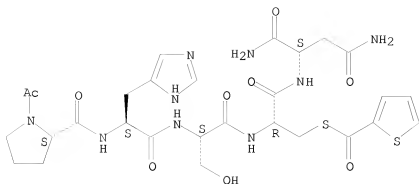
RN 701201-08-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-thienylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



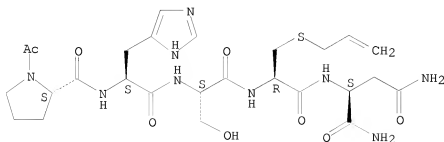
RN 701201-09-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-2-propenyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



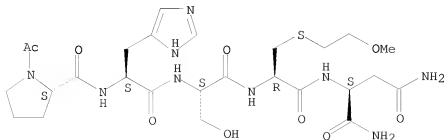
RN 701201-10-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-methoxyethyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

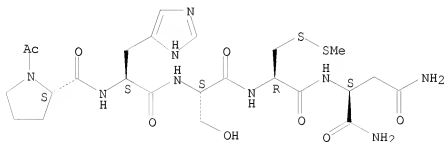


RN 701201-11-8 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-(methylidithio)-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

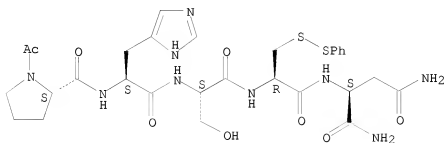


RN 701201-12-9 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-(phenyldithio)-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



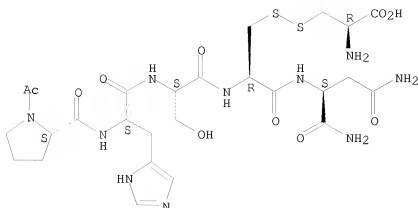
RN 701201-13-0 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, disulfide with L-cysteine (9CI) (CA INDEX NAME)

NTE multichain
modified

SEQ 1 PHSCN

1 C

Absolute stereochemistry.



IT 262438-43-7

RL: RCT (Reactant); RACT (Reactant or reagent)
(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

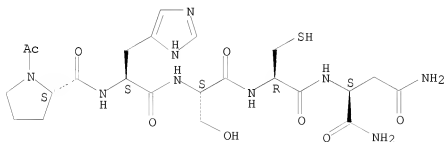
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyll- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 16 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:243058 CAPLUS

DOCUMENT NUMBER: 139:173332

TITLE: Inhibition of integrin $\alpha 5 \beta 1$ function with a small peptide (ATN-161) plus continuous 5-FU infusion reduces colorectal liver metastases and improves survival in mice

AUTHOR(S): Stoeltzing, Oliver; Liu, Wenbiao; Reinmuth, Niels; Fan, Fan; Parry, Graham C.; Parikh, Alexander A.; McCarty, Marya F.; Bucana, Corazon D.; Mazar, Andrew P.; Ellis, Lee M.

CORPORATE SOURCE: Department of Cancer Biology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030-4009, USA

SOURCE: International Journal of Cancer (2003), 104(4), 496-503

PUBLISHER: Wiley-Liss, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Integrin $\alpha 5 \beta 1$ is expressed on activated endothelial cells and plays a critical role in tumor angiogenesis. We hypothesized that a novel integrin $\alpha 5 \beta 1$ antagonist, ATN-161, would inhibit angiogenesis and growth of liver metastases in a murine model. We further hypothesized that combining ATN-161 with 5-fluorouracil (5-FU) chemotherapy would enhance the antineoplastic effect. Murine colon cancer cells (CT26) were injected into spleens of BALB/c mice to produce liver metastases. Four days thereafter, mice were given either ATN-161 (100 mg/kg, every 3rd day) or saline by i.p. injection, with or without combination of continuous-infusion 5-FU (100 mg/kg/2 wk), which was started on day 7. On day 20 after tumor cell inoculation, mice were killed and liver wts. and number of liver metastases were determined. A follow-up study on survival was also

conducted in which mice were randomized to receive ATN-161, 5-FU or ATN-161+5-FU. Combination therapy with ATN-161+5-FU significantly reduced tumor burden (liver weight) and number of liver metastases ($p < 0.02$). Liver tumors in the ATN-161 and ATN-161+5-FU groups had significantly fewer microvessels ($p < 0.05$) than tumors in the control or 5-FU-treated groups. Unlike treatment with either agent alone, ATN-161+5-FU significantly increased tumor cell apoptosis and decreased tumor cell proliferation ($p < 0.03$) and improved overall survival ($p < 0.03$, log-rank test). Targeting integrin $\alpha 5 \beta 1$ in combination with 5-FU infusion reduced liver metastases formation and improved survival in this colon cancer model. The enhancement of antineoplastic activity from the combination of anti-angiogenic therapy and chemotherapy may be a promising approach for treating metastatic colorectal cancer.

IT 262438-43-7, ATN 161

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of integrin $\alpha 5 \beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)

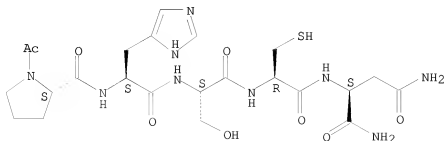
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 17 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:631705 CAPLUS

DOCUMENT NUMBER: 138:297158

TITLE: Suppression of Tumor Recurrence and Metastasis by a Combination of the PHSCN Sequence and the Antiangiogenic Compound Tetrathiomolybdate in Prostate Carcinoma

AUTHOR(S): van Golen, Kenneth L.; Bao, Liwei; Brewer, George J.; Pienta, Kenneth J.; Kamradt, Jeffrey M.; Livant, Donna L.; Merajver, Sofia D.

CORPORATE SOURCE: Division of Hematology and Oncology, Department of Internal Medicine, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI, 48109-0948, USA

SOURCE: Neoplasia (New York, NY, United States) (2002), 4(5), 373-379

CODEN: NEOPFL; ISSN: 1522-8002

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Plasma fibronectin-mediated invasion of human DU145 prostate cancer cell line was efficaciously inhibited in a rat tumor model by treatment with Ac-PHSCN-NH2 peptide. Invasion of DU145 cells was stimulated by the PHSRN sequence of plasma fibronectin. However, PHSCN acts as a competitive inhibitor of PHSRN-mediated invasion. In the current study, we determined whether PHSCN could inhibit the recurrence and metastasis of DU145 tumors after excision of the primary tumor in an athymic nude mouse model. We demonstrated that mice treated thrice weekly with i.v. Ac-PHSCN-NH2 peptide survived tumor-free for more than 30 wk post-primary tumor excision, whereas their untreated counterparts succumbed to recurrence and/or metastatic disease in significantly less time. Because of the universal requirement for angiogenesis in solid tumor growth, we tested the efficacy of copper deficiency induced by tetrathiomolybdate (TM) to retard tumor growth in the Dunning prostate cancer model. Significant reduction in size of the primary tumor was observed in mice rendered copper deficient. We sought to reduce tumor growth at the primary and metastatic sites by combining the anti-invasion Ac-PHSCN-NH2 peptide with TM. Improved survival, fewer metastatic lesions, and excellent tolerability were observed with the combination therapy.

IT 262438-43-7

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

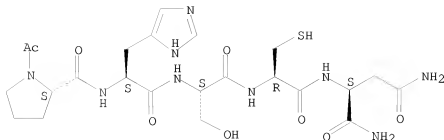
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 18 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:555761 CAPLUS
 DOCUMENT NUMBER: 137:121939
 TITLE: Compositions and methods for the use of fibronectin fragments in the diagnosis of cancer
 INVENTOR(S): Livant, Donna
 PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA
 SOURCE: PCT Int. Appl., 77 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057786	A2	20020725	WO 2002-US1189	20020115
WO 2002057786	A3	20031211		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2435320	A1	20020725	CA 2002-2435320	20020115
CA 2435320	C	20080603		
AU 2002245270	A1	20020730	AU 2002-245270	20020115
EP 1388013	A2	20040211	EP 2002-713418	20020115
EP 1388013	B1	20070711		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 366936	T	20070815	AT 2002-713418	20020115
PRIORITY APPLN. INFO.: US 2001-765496 A 20010118				
WO 2002-US1189 W 20020115				

OTHER SOURCE(S): MARPAT 137:121939

AB The present invention concerns the detection tumors in vivo, the imaging of tumors in vivo, and the imaging of cancerous tissue in pathol. samples. In particular the present invention incorporates the use of fibronectin fragments into these same detection and imaging methods.

IT 262438-43-7 443305-20-2 443305-23-5
 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses)

(comps. and methods for use of fibronectin fragments in diagnosis of cancer)

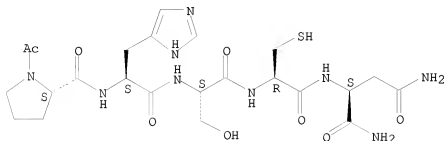
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

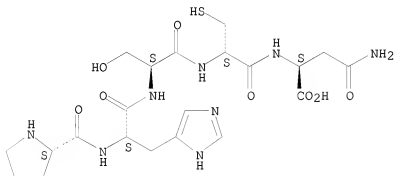


RN 443305-20-2 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI) (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



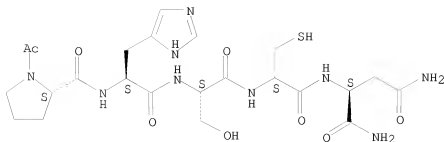
RN 443305-23-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

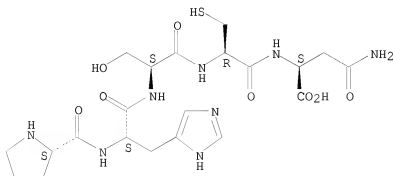
Absolute stereochemistry.



IT 252229-85-9P
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PRÉP (Preparation); USES (Uses)
 (comps. and methods for use of fibronectin fragments in diagnosis of cancer)
 RN 252229-85-9 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 19 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2000:824291 CAPLUS
 DOCUMENT NUMBER: 134:21425
 TITLE: Protection of endogenous therapeutic peptides from
 peptidase activity through conjugation to blood
 components
 INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter
 G.; Holmes, Darren L.; Thibaudeau, Karen
 PATENT ASSIGNEE(S): Conjuchem, Inc., Can.
 SOURCE: PCT Int. Appl., 733 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 5
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517
WO 2000069900	A3	20010215		

WO 2000069900	A9	20020704		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2373252	A1	20001123	CA 2000-2373252	20000517
CA 2373252	C	20070807		
CA 2373680	A1	20001123	CA 2000-2373680	20000517
CA 2373680	C	20080729		
CA 2499211	A1	20001123	CA 2000-2499211	20000517
CA 2501421	A1	20001123	CA 2000-2501421	20000517
CA 2505617	A1	20001123	CA 2000-2505617	20000517
CA 2623458	A1	20001123	CA 2000-2623458	20000517
WO 2000070665	A2	20001123	WO 2000-IB763	20000517
WO 2000070665	A3	20010419		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
EP 1105409	A2	20010613	EP 2000-936023	20000517
EP 1105409	B1	20060301		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY			
EP 1171582	A2	20020116	EP 2000-929748	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
EP 1264840	A1	20021211	EP 2002-14617	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
JP 2003500341	T	20030107	JP 2000-619018	20000517
JP 2003508350	T	20030304	JP 2000-618316	20000517
AU 765753	B2	20030925	AU 2000-51393	20000517
EP 1591453	A1	20051102	EP 2005-105384	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
CN 1698881	A	20051123	CN 2005-10005990	20000517
EP 1598365	A1	20051123	EP 2005-105387	20000517
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
EP 1623994	A2	20060208	EP 2005-108328	20000517
EP 1623994	A3	20080716		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL			
AT 318835	T	20060315	AT 2000-936023	20000517
PT 1105409	T	20060731	PT 2000-936023	20000517
ES 2257298	T3	20060801	ES 2000-936023	20000517
CN 101289500	A	20081022	CN 2008-10091504	20000517
US 6849714	B1	20050201	US 2000-623548	20000905
US 6514500	B1	20030204	US 2000-657332	20000907
US 7090851	B1	20060815	US 2000-657336	20000907
US 7144854	B1	20061205	US 2000-657431	20000907
ZA 2001006676	A	20020719	ZA 2001-6676	20010814
ZA 2001009110	A	20020613	ZA 2001-9110	20011105

US 20030108567	A1	20030612	US 2002-287892	20021104
US 6821949	B2	20041123		
US 20030108568	A1	20030612	US 2002-288340	20021104
US 6887849	B2	20050503		
US 20040127398	A1	20040701	US 2003-722733	20031125
US 20040138100	A1	20040715	US 2003-723099	20031125
US 20050176641	A1	20050811	US 2005-40810	20050121
US 20050176643	A1	20050811	US 2005-67556	20050225
JP 2005263807	A	20050929	JP 2005-115175	20050412
JP 2005239736	A	20050908	JP 2005-140407	20050512
JP 2005255689	A	20050922	JP 2005-151458	20050524
JP 4116016	B2	20080709		
US 20060009377	A1	20060112	US 2005-170967	20050629
US 20060058235	A1	20060316	US 2005-215967	20050830
JP 2006151986	A	20060615	JP 2005-361126	20051214
US 20060135426	A1	20060622	US 2005-304446	20051214
US 20060135428	A1	20060622	US 2006-350703	20060208
US 20080194486	A1	20080814	US 2007-923222	20071024
US 20080199532	A1	20080821	US 2007-926843	20071029
JP 2008101021	A	20080501	JP 2007-325307	20071217
JP 2008110986	A	20080515	JP 2008-8554	20080117
JP 2008150384	A	20080703	JP 2008-8555	20080117
PRIORITY APPLN. INFO.:			US 1999-134406P	P 19990517
			US 1999-153406P	P 19990910
			US 1999-159783P	P 19991015
			US 1999-134406	A 19990517
			US 1999-153406	A 19990910
			US 1999-159783	A 19991015
			CA 2000-2363712	A3 20000517
			CA 2000-2373680	A3 20000517
			CN 2000-807671	A3 20000517
			EP 2000-932570	A3 20000517
			EP 2000-936023	A3 20000517
			JP 2000-618316	A3 20000517
			JP 2000-618318	A3 20000517
			JP 2000-618327	A3 20000517
			JP 2000-619018	A3 20000517
			WO 2000-IB763	W 20000517
			WO 2000-US13576	W 20000517
			US 2000-623543	A1 20000905
			US 2000-623548	A1 20000905
			US 2000-657276	A2 20000907
			US 2000-657332	A3 20000907
			US 2000-657431	A1 20000907
			US 2002-400199P	P 20020731
			US 2002-400413P	P 20020731
			US 2002-288340	A1 20021104
			WO 2003-CA1097	W 20030729
			US 2003-471348	A1 20030908
			US 2003-722733	A1 20031125
			US 2005-40810	A2 20050121
			US 2005-67556	A1 20050225
			US 2005-170967	A1 20050629
			US 2005-215967	A1 20050830

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a

blood component. The solid phase peptide synthesis of a number of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH₂) conjugated to human serum albumin via MPA remained relatively constant through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amount of K5 in only 4 h in plasma.

IT 252229-85-9

RL: PRP (Properties)

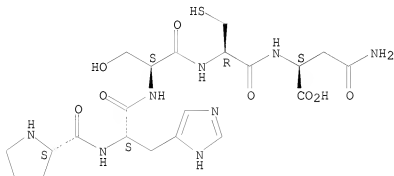
(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



L2 ANSWER 20 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:102218 CAPLUS

DOCUMENT NUMBER: 132:245978

TITLE: Anti-invasive, antitumorogenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma
 AUTHOR(S): Livant, Donna L.; Brabec, R. Kaye; Pienta, Kenneth J.; Allen, David L.; Kurachi, Kotoku; Markwart, Sonja; Upadhyaya, Ameet

CORPORATE SOURCE: Department of Cell and Development Biology, University of Michigan Medical School, Ann Arbor, MI, 48109-0616, USA

SOURCE: Cancer Research (2000), 60(2), 309-320

CODEN: CNREA8; ISSN: 0008-5472

PUBLISHER: AACR Subscription Office

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Using naturally serum-free SU-ECM basement membranes as invasion substrates showed that plasma fibronectin was necessary to stimulate invasion by DU 145 human and metastatic MATLyLu (MLL) rat prostate carcinoma cells. This activity mapped to the PHSRN sequence, which induced invasion through $\alpha 5 \beta 1$ integrin. PHSCN, a competitive inhibitor, blocked both PHSRN- and serum-induced invasion. Acetylated,

amidated PHSCN (Ac-PHSCN-NH₂) was 30-fold more potent; however, Ac-HSPNC-NH₂ was inactive. Rats receiving injections s.c. with 100,000 MLL cells were treated systemically by i.v. injection three times weekly with 1 mg of either Ac-PHSCN-NH₂ or Ac-HSPNC-NH₂ beginning 24 h later, three times weekly with 1 mg of Ac-PHSCN-NH₂ beginning only after surgery to remove large (2 cm) MLL tumors, or were left untreated. MLL tumors grew rapidly in Ac-HSPNC-NH₂-treated and in untreated rats. MLL tumor growth in rats treated with Ac-PHSCN-NH₂ beginning 1 day after MLL cell injection was reduced by 99.9% during the first 16 days of treatment, although subsequent tumor growth occurred. MLL tumor cryosections immunostained with anti-PECAM-1 showed that Ac-PHSCN-NH₂ inhibited neovascularization by 12-fold during this time. Whether initiated after MLL cell injection or only after MLL tumor removal, Ac-PHSCN-NH₂ treatment reduced the nos. of MLL lung colonies and micrometastases by 40- to > 100-fold, whereas Ac-HSPNC-NH₂ was inactive. Thus, Ac-PHSCN-NH₂ may be a potent antitumorigenic and antimetastatic agent for postsurgical use prior to extensive metastasis.

IT 262438-43-7

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(anti-invasive, antitumorigenic, and antimetastatic activities of the PHSCN sequence in prostate carcinoma)

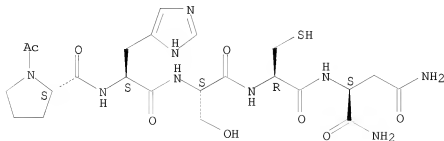
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 58 THERE ARE 58 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L2 ANSWER 21 OF 21 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:794362 CAPLUS

DOCUMENT NUMBER: 132:30820

TITLE: Anticancer compounds and methods

INVENTOR(S): Livant, Donna L.

PATENT ASSIGNEE(S): Regents of the University of Michigan, USA

SOURCE: U.S., 53 pp., Cont.-in-part of U. S. 5,840,514.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6001965	A	19991214	US 1997-915189	19970820
US 5840514	A	19981124	US 1996-754322	19961121
CA 2264570	A1	19980528	CA 1997-2264570	19971120
WO 9822617	A1	19980528	WO 1997-US21674	19971120
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
EP 928340	A1	19990714	EP 1997-949632	19971120
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
US 5989850	A	19991123	US 1998-140047	19980826
US 6472369	B1	20021029	US 1999-373694	19990813
AU 765126	B2	20030911	AU 2001-51984	20010618
US 20030083264	A1	20030501	US 2002-237850	20020909
US 7148196	B2	20061212		
AU 2003268832	A1	20040122	AU 2003-268832	20031211
PRIORITY APPLN. INFO.:			US 1996-754322	A2 19961121
			US 1997-915189	A 19970820
			WO 1997-US21674	W 19971120
			US 1999-373694	A3 19990813
			AU 2001-51984	A3 20010618

OTHER SOURCE(S): MARPAT 132:30820

AB The testing of tumor cells, including human tumors capable of metastases, in assays employing fibronectin-depleted substrates is described. Ex vivo induction of cells, including biopsied human cells, is performed with invasion-inducing agents. Addnl., anti-cancer chemotherapeutics are described. Specifically, chemotherapeutic agents which have anti-metastatic and anti-growth properties are described.

IT 252229-85-9

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

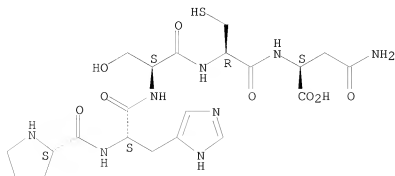
(antitumor peptides and inhibition of metastasis)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
=> file registry
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          282.48      319.54

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                                ENTRY      SESSION
CA SUBSCRIBER PRICE          -33.60      -33.60
```

FILE 'REGISTRY' ENTERED AT 18:01:22 ON 02 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 30 NOV 2008 HIGHEST RN 1077629-73-2
DICTIONARY FILE UPDATES: 30 NOV 2008 HIGHEST RN 1077629-73-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stdnoc/properties.html>

```
=> phs.n/sqsp and sql=5
      84 PHS.N/SQSP
      82985 SQL=5
L3      84 PHS.N/SQSP AND SQL=5
```

```
=> file caplus
COST IN U.S. DOLLARS          SINCE FILE      TOTAL
                                ENTRY      SESSION
FULL ESTIMATED COST          36.01      355.55

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)  SINCE FILE      TOTAL
                                                ENTRY      SESSION
CA SUBSCRIBER PRICE          0.00      -33.60
```

FILE 'CAPLUS' ENTERED AT 18:01:44 ON 02 DEC 2008
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is
held by the publishers listed in the PUBLISHER (PB) field (available
for records published or updated in Chemical Abstracts after December

26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 2 Dec 2008 VOL 149 ISS 23
FILE LAST UPDATED: 1 Dec 2008 (20081201/ED)

Caplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/legal/infopolicy.html>

=> L3

L4 76 L3

=> dup rem L4

PROCESSING COMPLETED FOR L4

L5 76 DUP REM L4 (0 DUPLICATES REMOVED)

=> d ibib abs total L4 hitseq

L4 ANSWER 1 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:1360637 CAPLUS

TITLE: Genetic polymorphisms associated with an increased risk of neurodegenerative disease and their detection and diagnostic and prophylactic use

INVENTOR(S): Grupe, Andrew; Li, Yonghong

PATENT ASSIGNEE(S): Applera Corporation, USA

SOURCE: PCT Int. Appl., 137pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008137110	A1	20081113	WO 2008-US5734	20080501
<p>W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW</p> <p>RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LI, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p>				
US 20080286796	A1	20081120	US 2008-151163	20080501
PRIORITY APPLN. INFO.:			US 2007-927864P	P 20070503
<p>AB The present invention is based on the discovery of genetic polymorphisms that are associated with neurodegenerative disease, particularly Alzheimer's disease and Parkinson's disease. In particular, the present invention relates to nucleic acid mols. containing the polymorphisms, variant proteins</p>				

encoded by such nucleic acid mols., reagents for detecting the polymorphic nucleic acid mols. and proteins, and methods of using the nucleic acid and proteins as well as methods of using reagents for their detection. An anal. of genetic polymorphisms surrounding the NEDD9 gene is reported. Expression of the NEDD9 gene is lower in the hippocampus of Alzheimer's disease patients than in controls. A number of polymorphisms around the gene were shown to be associated with an increased risk of Alzheimer's disease.

IT INDEXING IN PROGRESS

IT 262438-43-7, ATN-161

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(in treatment of Alzheimer's disease; genetic polymorphisms associated with increased risk of neurodegenerative disease and their detection and diagnostic and prophylactic use)

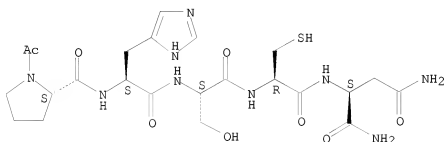
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 76 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2008:1048083 CAPLUS

DOCUMENT NUMBER: 149:465698

TITLE: A novel approach to observing synergy effects of PHSRN on integrin-RGD binding using intelligent surfaces
AUTHOR(S): Ebara, Mitsuhiro; Yamato, Masayuki; Aoyagi, Takao; Kikuchi, Akihiko; Sakai, Kiyotaka; Okano, Teruo
CORPORATE SOURCE: Department of Applied Chemistry, Waseda University, 3-4-1 Ohkubo, Shinjuku, Tokyo, 169-8555, Japan
SOURCE: Advanced Materials (Weinheim, Germany) (2008), 20(16), 3034-3038

CODEN: ADVMEW; ISSN: 0935-9648

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A novel approach has been developed to observe time-dependent changes in the affinity of integrin-mediated cell binding to substrates using intelligent surfaces incorporating a temperature-responsive polymer, poly(N-isopropylacrylamide) (PIPAAm) along with cell adhesive peptides (e.g., Arg-Gly-Asp-Ser (RGDS)). The grafted PIPAAm acts as an "on-off" switch for integrin-RGDS binding, i.e., the grafted layer dehydrates and shrinks, thus exposing immobilized peptides to integrins under cell culture conditions at 37°. However, upon lowering the temperature to

20°, the grafted PIPAAm suddenly becomes hydrated and extends outwards to shield the peptides from integrin access, resulting in decreased binding affinity between integrins and peptides, followed subsequently by cell detachment from the surface. At temps. above and below the lower critical solution temperature (LCST), the peptides are accessible and shielded from integrin access, resp. By co-immobilizing a Pro-His-Ser-Arg-Asn (PHSRN) sequence on intelligent surfaces that enables the stable binding of RGDS to $\alpha 5 \beta 1$ integrin, the synergistic roles of the PHSRN sequence have been investigated by studying the time-dependent cell detachment behavior from these surfaces.

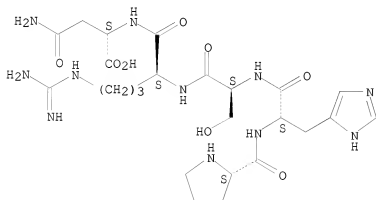
IT 158622-13-0
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (novel approach to observing synergy effects of peptide PHSRN on integrin-RGD binding using intelligent surfaces)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:557232 CAPLUS

DOCUMENT NUMBER: 149:5871

TITLE: Up-regulation of HSP70 by the fibronectin-derived peptide PHSRN in human corneal epithelial cells

AUTHOR(S): Ko, Ji-Ae; Yanai, Ryoji; Quan, Wu-Yong; Morishige, Naoyuki; Nishida, Teruo

CORPORATE SOURCE: Department of Ophthalmology, Yamaguchi University Graduate School of Medicine, 1-1-1 Minami-Kogushi, Ube City, Yamaguchi, 755-8505, Japan

SOURCE: Biochemical and Biophysical Research Communications (2008), 370(3), 424-428
 CODEN: BBRCA9; ISSN: 0006-291X

PUBLISHER: Elsevier

DOCUMENT TYPE: Journal

LANGUAGE: English

AB HSP70 is a member of the heat shock protein family and is induced by various types of cellular stress. We examined whether HSP70 might play a role in the healing of corneal epithelial wounds. Given that the PHSRN

peptide, which corresponds to the second cell-binding domain of fibronectin, promotes corneal epithelial migration, we investigated the effect of this peptide on HSP70 expression in cultured human corneal epithelial cells. Reverse transcription-polymerase chain reaction and immunoblot analyses revealed that PHSRN increased the amounts of HSP70 mRNA and protein in these cells in a concentration- and time-dependent manner, whereas a control peptide (NRSHP) had no such effects. Furthermore, the PHSRN-induced up-regulation of HSP70 was blocked by SB203580, an inhibitor of p38 mitogen-activated protein kinase (MAPK), but it was not affected by PD98059 or SP600125, inhibitors of signaling by the MAPKs ERK and JNK, resp. Our results suggest that induction of HSP70 expression may contribute to the promotion of corneal epithelial migration by PHSRN and hence to corneal epithelial wound healing.

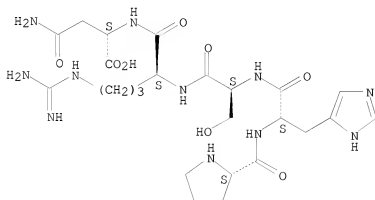
IT 158622-13-0
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (p38 MAPK-dependent up-regulation of HSP70 and promotion of corneal epithelial cell migration by fibronectin-derived peptide PHSRN)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 26 THERE ARE 26 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 76 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2008:556068 CAPLUS

DOCUMENT NUMBER: 148:523716

TITLE: Methods and systems for immobilizing polymeric corneal prostheses

INVENTOR(S): Shiuuey, Yichieh

PATENT ASSIGNEE(S): USA

SOURCE: PCT Int. Appl., 21pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

WO 2008055118	A2	20080508	WO 2007-US82880	20071029
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				

PRIORITY APPLN. INFO.: US 2006-863430P P 20061030

AB Corneal prostheses, such as onlays and implants, comprises a polymeric body having corrective optical properties having a surface which displays a native biomol. capable of crosslinking with endogenous moieties in corneal tissue. After placement, such prostheses may be immobilized by exposure to UV or other irradiation which crosslinks the biomols. with the endogenous moieties. Thus, a bonding reaction between a poly(2-hydroxyethyl methacrylate-methacrylic acid) (PHEMA/MAA) prosthesis derivatized with diazopyruvamide and corneal collagen was presented.

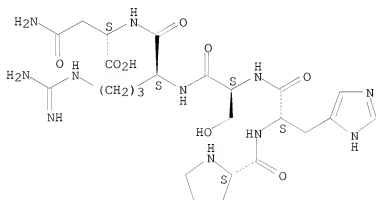
IT 158622-13-0
 RL: RCT (Reactant); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)
 (methods and systems including photochem. crosslinking for immobilizing polymeric corneal prostheses)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 5 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:475733 CAPLUS

DOCUMENT NUMBER: 148:463209

TITLE: Engineered integrin binding peptides

INVENTOR(S): Cochran, Jennifer R.; Kimura, Richard; Levin, Aron M.; Gambhir, Sanjiv S.

PATENT ASSIGNEE(S): The Board of Trustees of the Leland Stanford Junior

SOURCE: University, USA
PCT Int. Appl., 76pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008045252	A2	20080417	WO 2007-US21218	20071003
WO 2008045252	A3	20080807		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRIORITY APPLN. INFO.: US 2006-849259P P 20061004

AB Engineered peptides that bind with high affinity (low equilibrium dissociation constant (Kd)) to the cell surface receptors of fibronectin ($\alpha 5 \beta 1$) or vitronectin ($\alpha v \beta 3$ and $\alpha v \beta 5$ integrins) are disclosed. These peptides are based on a mol. scaffold into which a subsequence containing the RGD integrin-binding motif has been inserted. The subsequence (RGD mimic) comprises about 9-13 amino acids, and the RGD contained within the subsequence can be flanked by a variety of amino acids, the sequence of which was determined by sequential rounds of selection (in vitro evolution). The mol. scaffold is preferably based on a knottin, e.g., EETI (Trypsin inhibitor 2) (Trypsin inhibitor II) (EETI-II) [Ecballium elaterium (Jumping cucumber)], AgRP (Agouti-related protein), and Agatoxin IVB, which peptides have a rigidly defined three-dimensional conformation. Also provided is a method of treating a proliferative disease comprising the step of administering to a subject in need thereof a composition comprising an integrin binding peptide comprising a mol. scaffold, wherein the mol. scaffold is covalently linked to either end of an RGD mimic sequence selected from the group consisting of XXXRGDXXXX and XXRGDXXXX, where X is any amino acid. Also provided is a method for imaging tumors, in which engineered integrin binding peptides specific for certain integrins are administered to a living organism, and the binding of the peptides to sites where endothelial integrins are highly expressed serves to image tumors.

IT 158622-13-0

RL: PRP (Properties)

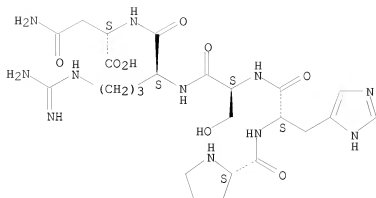
(Unclaimed; engineered integrin binding peptides)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 6 OF 76 CAPLUS COPYRIGHT 2008 ACS ON STN

ACCESSION NUMBER: 2008:422798 CAPLUS

DOCUMENT NUMBER: 149:417042

TITLE: Pharmacology of the Novel Antiangiogenic Peptide ATN-161 (Ac-PHSCN-NH2): Observation of a U-Shaped Dose-Response Curve in Several Preclinical Models of Angiogenesis and Tumor Growth

AUTHOR(S): Donate, Fernando; Parry, Graham C.; Shaked, Yuval; Hensley, Harvey; Guan, Xiaojun; Beck, Ivy; Tel-Tsur, Ziva; Plunkett, Marian L.; Manuia, Mari; Shaw, David E.; Kerbel, Robert S.; Mazar, Andrew P.

CORPORATE SOURCE: Attenuon, LLC, San Diego, CA, 92121, USA

SOURCE: Clinical Cancer Research (2008), 14(7), 2137-2144

CODEN: CCRE4; ISSN: 1078-0432

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB PURPOSE: ATN-161 (Ac-PHSCN-NH2) is an integrin-binding peptide that is currently in phase II trials in cancer patients. This peptide has been shown to have antitumor activity in a number of different preclin. models. Exptl. Design: In this study, we examined the binding, biodistribution, and dose and biomarker response of ATN-161 in several animal models. RESULTS: ATN-161 bound to the β subunit of a number of different integrins implicated in tumor growth and progression, which depended on its cysteine thiol. The peptide had antiangiogenic activity in the Matrigel plug model, and this activity could be reversed by inhibitors of protein kinase A, an effector of $\alpha 5 \beta 1$ -dependent angiogenesis. A labeled analog of ATN-161, ATN-453, localized to neovessels but not to preexisting vasculature in vivo. The half-life of the peptide when localized to a tumor was much longer than in plasma. Dose-response studies in the Matrigel plug model of angiogenesis or a Lewis lung carcinoma model of tumor growth showed a U-shaped dose-response curve with 1 to 10 mg/kg given thrice a week, being the optimal dose range of ATN-161. Two addnl. pharmacodynamic models of angiogenesis (dynamic contrast-enhanced magnetic resonance imaging and measurement of endothelial cell progenitors) also revealed U-shaped dose-response curves. CONCLUSIONS: The presence of a U-shaped dose-response curve presents a significant challenge to identifying a biol. active dose of ATN-161. However, the identification of biomarkers of angiogenesis that also exhibit this same U-shaped response should allow the translation of those biomarkers to the clinic, allowing them to be used to identify the active dose of ATN-161 in phase II studies.

IT 262438-43-7, ATN-161

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL

(Biological study); USES (Uses)

(ATN-161 peptide bound to $\beta 1$ subunit of human venous and microvascular endothelial cell, inhibited angiogenesis and localized to neovessels in tumor of mouse model of matrigel plug)

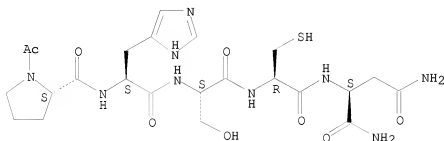
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:71940 CAPLUS

DOCUMENT NUMBER: 148:160164

TITLE: RGD-containing peptidic compounds that bind $\alpha 5\beta 1$ integrin, and methods of use

INVENTOR(S): Kokkoli, Efrosini; Mardilovich, Anastasia; Garg, Ashish

PATENT ASSIGNEE(S): Regents of the University of Minnesota, USA

SOURCE: PCT Int. Appl., 81pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008008523	A1	20080117	WO 2007-US16046	20070713
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.:

US 2006-831037P

P 20060714

OTHER SOURCE(S): MARPAT 148:160164

AB The invention provides biol. active RGD-contg.peptidic compds. that bind an $\alpha 5\beta 1$ integrin. Also included in the invention are compns. and methods for using such biol. active compds.

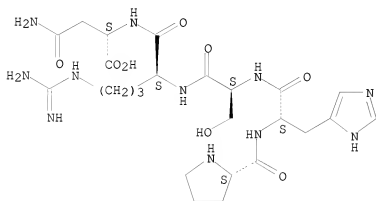
IT 158622-13-0
 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study)
 (peptidic compds. that bind $\alpha 5\beta 1$ integrin, and methods of use)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



IT 552314-28-0
 RL: PAC (Pharmacological activity); PRP (Properties); BIOL (Biological study)
 (peptidic compds. that bind $\alpha 5\beta 1$ integrin, and methods of use)

RN 552314-28-0 CAPLUS

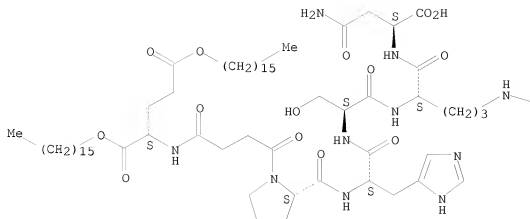
CN L-Asparagine, 1-[4-[[(1S)-4-(hexadecyloxy)-1-[(hexadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 PHSRN

1 E

Absolute stereochemistry.



REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 8 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2008:69974 CAPLUS

DOCUMENT NUMBER: 148:175726

TITLE: Methods, systems, and compositions for extracellular matrix production

INVENTOR(S): Moghe, Prabhas V.; Sharma, Ram; Pereira, Marian

PATENT ASSIGNEE(S): Rutgers, The State University, USA

SOURCE: PCT Int. Appl., 65pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

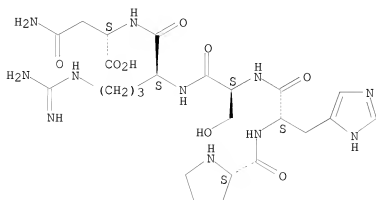
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008008435	A2	20080117	WO 2007-US15898	20070711
WO 2008008435	A3	20081106		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL,				

PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN,
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
 RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF,
 BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW,
 GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRIORITY APPLN. INFO.: US 2006-830911P P 20060714
 AB Comps., methods, and kits for repair and production of extracellular matrix
 are provided. In the broad aspect, the composition comprises a ligand of
 $\alpha 5 \beta 1$ integrin attached to a surface of a nanoparticle composed
 of a protein, with a proviso that the protein is not fibronectin.
 IT 158622-13-0
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic
 use); BIOL (Biological study); USES (Uses)
 (amino acid sequence; methods, systems, and comps. for extracellular
 matrix production)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 9 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1311686 CAPLUS
 DOCUMENT NUMBER: 148:127954
 TITLE: Material dependent differences in inflammatory gene
 expression by giant cells during the foreign body
 reaction
 AUTHOR(S): Luttkhuizen, D. T.; Dankers, P. Y. W.; Harmsen, M.
 C.; van Luyn, M. J. A.
 CORPORATE SOURCE: Department of Pathology and Laboratory Medicine,
 Medical Biology Section, University Medical Center
 Groningen, University of Groningen, Groningen, 9713
 GZ, Neth.
 SOURCE: Journal of Biomedical Materials Research, Part A
 (2007), 83A(3), 879-886
 CODEN: JBMRCH; ISSN: 1549-3296
 PUBLISHER: John Wiley & Sons, Inc.
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB Multinucleated giant cells (GCs) are often observed in the foreign body

reaction against implanted materials. The in vivo function of GCs in this inflammatory process remains to be elucidated. GCs degrade collagen implants in rats and may also orchestrate the inflammatory process via the expression and secretion of modulators, such as cytokines and chemokines. In this study, the authors show that the gene expression of PMN chemoattractants, CXCL1/KC and CXCL2/MIP-2, is high in GCs micro-dissected from explanted Dacron, crosslinked collagen (HDSC), and bioactive ureido-pyrimidinone functionalized oligocaprolactone (bioactive PCLdiUPy). Conversely, the gene expression levels of TGF β and pro-angiogenic mediators VEGF and FGF were found to be low in these GCs as compared with the expression levels in total explants. GCs in bioactive PCLdiUPy displayed high cytokine and angiogenic mediator expression compared with GCs isolated from the two other studied materials, whereas chemokine gene expression in GCs isolated from HDSC was low. Thus, GCs adopt their expression profile in response to the material that is encountered.

IT 863770-46-1

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(material dependent differences in inflammatory gene expression by
giant cells during the foreign body reaction)

RN 863770-46-1 CAPLUS

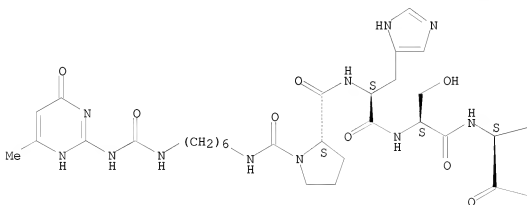
CN L-Asparagine, 1-[[[6-[[[(1,6-dihydro-4-methyl-6-oxo-2-pyrimidinyl)amino]carbonyl]amino]hexyl]amino]carbonyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

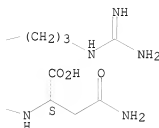
NTE modified (modifications unspecified)

SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:1311656 CAPLUS

DOCUMENT NUMBER: 148:127951

TITLE: Monocyte activation in response to polyethylene glycol hydrogels grafted with RGD and PHSRN separated by interpositional spacers of various lengths
Schmidt, David Richard; Kao, Weiyan John
CORPORATE SOURCE: School of Pharmacy, University of Wisconsin-Madison, Madison, WI, 53705, USA

SOURCE: Journal of Biomedical Materials Research, Part A (2007), 83A(3), 617-625
CODEN: JBMRCH; ISSN: 1549-3296

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

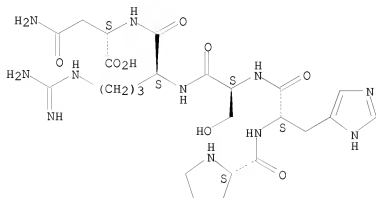
LANGUAGE: English

AB Polyethylene glycol (PEG) is often cited as a "stealth" polymer, capable of resisting both protein adsorption and cell adhesion. By extension, PEG would then be expected to limit the host response. Monocyte-derived macrophages play an integral role in inflammation, and thus their response to a material can potentially dictate the overall host response to a biomaterial. In the present study, monocyte responses following interaction with a photopolymerized PEG hydrogel were compared with those from standard tissue culture polystyrene (TCPS). Additionally, the effect of the spacing between RGD and PHSRN, the corresponding synergy sequence on fibronectin (FN), was evaluated using peptides with differing spacer lengths grafted to the PEG hydrogel. Monocyte adhesion on the PEG-only hydrogel was comparable with that of TCPS; however, the secretion of the proinflammatory molecules interleukin-1 β (IL-1 β), tumor necrosis factor- α (TNF- α), and granulocyte-macrophage colony stimulating factor (GM-CSF) increased dramatically following monocyte interaction with PEG-only hydrogels as compared with TCPS. The matrix metalloproteinase-2 (MMP-2) concentration was similar for all surfaces, while both the matrix metalloproteinase-9 (MMP-9) and FN concentrations were above the range of the assay for all substrates. Cell density was higher on the PHSRNG13RGD grafted substrate as compared with PHSRNG6RGD, but neither sequence increased cell density versus RGD alone. Although protein concentration did sometimes vary with different peptides, this variation was minimal in comparison with the surface effects between TCPS and the PEG-only hydrogel. This study explores the roles of PEG and FN-derived peptides on

monocyte activation.
 IT 158622-13-0D, conjugates with poly(ethylene glycol)
 RL: BSU (Biological study, unclassified); PRP (Properties); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (monocyte activation in response to polyethylene glycol hydrogels
 grafted with RGD and PHSRN separated by interpositional spacers of various
 lengths)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

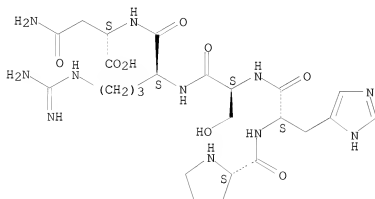
L4 ANSWER 11 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:1086812 CAPLUS
 DOCUMENT NUMBER: 147:401150
 TITLE: Cell culture carrier
 INVENTOR(S): Kurokawa, Masato; Takahashi, Kazuhiro
 PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan
 SOURCE: PCT Int. Appl., 65pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007108205	A1	20070927	WO 2007-JP217	20070313
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ,			

BY, KG, KZ, MD, RU, TJ, TM
 JP 2007275056 A 20071025 JP 2007-63893 20070313
 PRIORITY APPLN. INFO.: JP 2006-74009 A 20060317
 AB A cell culture carrier is provided, which enables to improve cell-proliferation properties in a serum-free culture, and possesses no risk of contamination of an infection factor. The cell culture carrier is characterized in that it comprises crosslinked poly(meth)acrylate (salt) particles (A), and an artificial polypeptide (P) having at least one cell adhesive minimal amino acid sequence (X) in a single mol., and it possesses a water retention value of 2-50g/g. The component (A) is preferably the particles produced by performing a reverse phase suspension polymerization of an aqueous monomer solution comprising (meth)acrylic acid and/or an alkali metal salt of (meth)acrylic acid. The component (P) preferably possesses at least one auxiliary amino acid sequence (Y) in a single mol.
 IT 158622-13-0
 RL: PRP (Properties)
 (unclaimed sequence; cell culture carrier)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



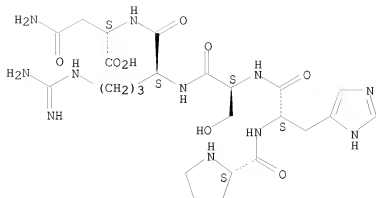
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:966569 CAPLUS
 DOCUMENT NUMBER: 147:321273
 TITLE: Vaccines comprising T cell epitope and B cell epitope linked through cell adhesion molecule binding motif for inducing anti-amyloid β antibodies to treat Alzheimer's disease
 INVENTOR(S): Yano, Akira; Nishizawa, Toshiki; Miwa, Yoshikatsu
 PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Japan
 SOURCE: PCT Int. Appl., 25pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007097251	A1	20070830	WO 2007-JP52828	20070216
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
CA 2638775	A1	20070830	CA 2007-2638775	20070216
EP 1992639	A1	20081119	EP 2007-714358	20070216
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR			
KR 2008103560	A	20081127	KR 2008-722298	20080911
PRIORITY APPLN. INFO.:			JP 2006-44808	A 20060222
			WO 2007-JP52828	W 20070216
AB	The object is to provide a peptide vaccine for prevention and/or treatment of a disease induced by amyloid- β -peptide such as Alzheimer's disease. Disclosed is a peptide having: a peptide segment which has an amino acid sequence for a multiagretope-type T-cell epitope having an established immunol. memory or an amino acid sequence for a peptide containing the epitope; and a peptide segment which has an amino acid sequence for a B-cell epitope located at a specific cite of amyloid- β -peptide or an amino acid sequence for a peptide containing the epitope, the two peptide segments being linked via a linker, wherein the peptide also has therein an amino acid sequence for a cell-binding motif of a cell adhesion mol.			
IT	158622-13-ODP, derivs. RL: BPN (Biosynthetic preparation); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (vaccines comprising T cell epitope and B cell epitope linked through cell adhesion mol. binding motif for inducing anti-amyloid β antibodies to treat Alzheimer's disease)			
RN	158622-13-0 CAPLUS			
CN	L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)			

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:905964 CAPLUS

DOCUMENT NUMBER: 147:427682

TITLE: Convenient solid-phase synthesis of ureido-pyrimidinone modified peptides

AUTHOR(S): Dankers, Patricia Y. W.; Adams, P. J. H. M.; Loewik, Dennis W. P. M.; van Hest, Jan C. M.; Meijer, E. W.

CORPORATE SOURCE: Laboratory of Macromolecular and Organic Chemistry, Eindhoven University of Technology, Eindhoven, 5600, Neth.

SOURCE: European Journal of Organic Chemistry (2007), (22), 3622-3632, S3622/1-S3622/2

CODEN: EJOCFK; ISSN: 1434-193X

PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 147:427682

AB Peptides were modified with quadruple hydrogen bonding ureido-pyrimidinone moieties for potential uses in supramol. architectures for biomedical applications. A convenient solid-phase synthesis method was developed to functionalize peptide sequences with ureido-pyrimidinone units. Two different ureido-pyrimidinone synthons were used using a carbonyldiimidazole-activated amine or an isocyanate functionality. Oligopeptides were functionalized on the solid support using two coupling strategies: on the N-terminus or selectively on the ϵ -position of a C-terminal lysine. Several peptides, varying from cell adhesion sequences to collagen binding peptides and cysteine derivs. that are useful for native chemical ligation, were prepared to show the generality of this approach.

IT 951393-49-ODP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(solid-phase preparation of ureido-pyrimidinone modified peptides)

RN 951393-49-0 CAPLUS

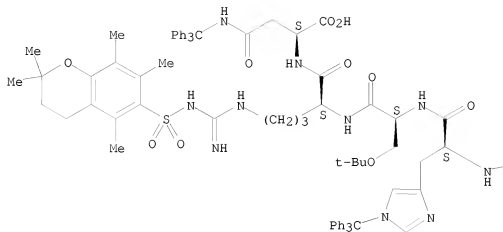
CN L-Asparagine, 1-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(1,1-dimethylethyl)-L-seryl-N5-[[[3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-yl)sulfonyl]amino]iminomethyl]-L-ornithyl-N-(triphenylmethyl)- (CA INDEX NAME)

NTE modified (modifications unspecified)

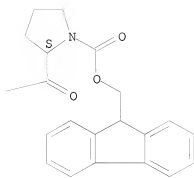
SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A



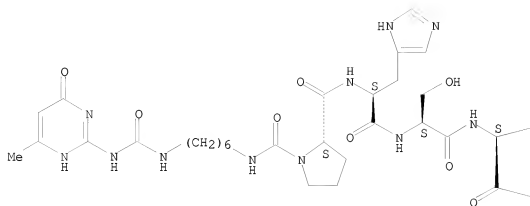
PAGE 1-B



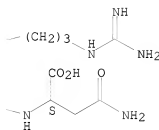
IT 863770-46-1P
RL: SPN (Synthetic preparation); PREP (Preparation)
(solid-phase preparation of ureido-pyrimidinone modified peptides)
RN 863770-46-1 CAPLUS
CN L-Asparagine, 1-[[[6-[[[(1,6-dihydro-4-methyl-6-oxo-2-pyrimidinyl)amino]carbonyl]amino]hexyl]amino]carbonyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)
NTE modified (modifications unspecified)
SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 14 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2007:876134 CAPLUS
DOCUMENT NUMBER: 147:335950
TITLE: Angiogenesis blockade as a new therapeutic approach to
experimental colitis
AUTHOR(S): Danese, Silvio; Sans, Miquel; Spencer, David M.; Beck,
Ivy; Donate, Fernando; Plunkett, Marian L.; de la
Motte, Carol; Redline, Raymond; Shaw, David E.;
Levine, Alan D.; Mazar, Andrew P.; Fiocchi, Claudio
CORPORATE SOURCE: Division of Gastroenterology, Istituto Clinico
Humanitas, Milan, 20089, Italy
SOURCE: Gut (2007), 56(6), 855-862
CODEN: GUITAK; ISSN: 0017-5749
PUBLISHER: BMJ Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Background: Neoangiogenesis is a critical component of chronic inflammatory

disorders. Inhibition of angiogenesis is an effective treatment in animal models of inflammation, but has not been tested in exptl. colitis. Aim: To investigate the effect of ATN-161, an anti-angiogenic compound, on the course of exptl. murine colitis. Method: Interleukin 10-deficient (IL10-/-) mice and wild-type mice were kept in ultra-barrier facilities (UBF) or conventional housing, and used for exptl. conditions. Dextran sodium sulfate (DSS)-treated mice were used as a model of acute colitis. Mice were treated with ATN-161 or its scrambled peptide ATN-163. Mucosal neoangiogenesis and mean vascular d. (MVD) were assessed by CD31 staining. A Disease Activity Index (DAI) was determined, and the severity of colitis was determined by a histol. score. Colonic cytokine production was measured by

ELISA,

and lamina propria mononuclear cell proliferation by thymidine incorporation. Result: MVD increased in parallel with disease progression in IL10-/- mice kept in conventional housing, but not in IL10-/- mice kept in UBF. Angiogenesis also occurred in DSS-treated animals. IL10-/- mice with established disease treated with ATN-161, but not with ATN-163, showed a significant and progressive decrease in DAI. The histol. colitis score was significantly lower in ATN-161-treated mice than in scrambled peptide-treated mice. Inhibition of angiogenesis was confirmed by a significant decrease of MVD in ATN-161-treated mice than in ATN-163-treated mice. No therapeutic effects were observed in the DSS model of colitis. ATN-161 showed no direct immunomodulatory activity in vitro. Conclusion: Active angiogenesis occurs in the gut of IL10-/- and DSS-treated colitic mice and parallels disease progression. ATN-161 effectively decreases angiogenesis as well as clin. severity and histol. inflammation in IL10-/- mice but not in the DDS model of inflammatory bowel disease (IBD). The results provide the rational basis for considering anti-angiogenic strategies in the treatment of IBD in humans.

IT

262438-43-7, ATN 161

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(ATN-161 decreased angiogenesis, disease progression in interleukin-10 deficient colitis mouse but not in DSS-induced colitis mouse thus providing rational basis for considering anti-angiogenic strategy for treatment of human IBD)

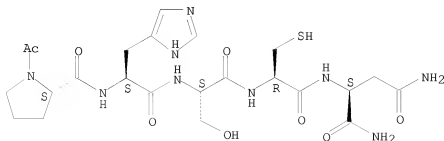
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT:

52

THERE ARE 52 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 15 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2007:220692 CAPLUS
 DOCUMENT NUMBER: 146:246242
 TITLE: Development of adhesive polypeptides for serum-free animal cell culture
 INVENTOR(S): Takahashi, Kazuhiro; Kurokawa, Masato
 PATENT ASSIGNEE(S): Sanyo Chemical Industries, Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 20pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2007051127	A	20070301	JP 2006-170069	20060620
PRIORITY APPLN. INFO.:			JP 2005-212252	A 20050722

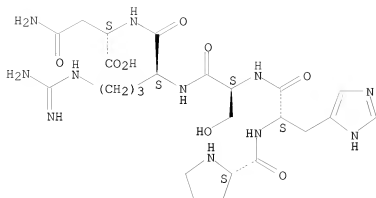
AB Adhesive polypeptides for serum-free animal cell culture have been developed. The adhesive peptides are linear polypeptides consist of min. adhesive peptide units (X1) and auxiliary peptide unit (Y) in alternative orders and adhesive peptide units (X2) at the regions other than N- and C-termini. The adhesive peptide units (X1 and X2) with twenty-three specific sequences such as Arg-Gly-Asp, Leu-Asp-Val, Leu-Aeg-Glu, His-Ala-Val and Arg-Glu-Asp-Val are claimed. The auxiliary peptide units are (Gly-Ala)a, (Gly-Ala-Gly-Ala-Gly-Ser)b, (Gly-Ala-Gly-Ala-Gly-Tyr)c, (Gly-Ala-Gly-Val-Gly-Tyr)d, (Gly-Ala-Gly-Tyr-Gly-Val)e, {Asp-Gly-Gly-(Ala)f-Gly-Gly-Ala}g, (Gly-Val-Pro-Gly-Val)h, (Gly)i-(Ala)j-(Gly-Gly-Ala)k, (Gly-Val-Gly-Val-Pro)m and/or (Gly-Pro-Pro)n, and a .apprx. n are integral nos.; a = 5 .apprx. 100; b, c, d and e = 2 .apprx. 33; f = 1 .apprx. 194; g = {1} .apprx. {200/(6 + f)}; h = 2 .apprx. 4; i and j = 10 .apprx. 200; k = 3 .apprx. 66; m 2 .apprx. 40 and n = 3 .apprx. 66. Adhesive polypeptides have modification with amino or ammonio group and the modified peptides are applied to matrix media for the use in cell culture system.

IT 158622-13-0
 RL: BUU (Biological use, unclassified); PRP (Properties); BIOL (Biological study); USES (Uses)
 (amino acid sequence of adhesive peptide unit; development of adhesive polypeptides for serum-free animal cell culture)

RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 16 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:144054 CAPLUS

DOCUMENT NUMBER: 146:222518

TITLE: Recombinant production of fibrinogen fusion proteins containing a truncated Aα chain of fibrinogen for uses alone or in fibrin polymers

INVENTOR(S): Hubbell, Jeffrey A.; Barker, Thomas A.

PATENT ASSIGNEE(S): Ecole Polytechnique Federale De Lausanne, Switz.

SOURCE: PCI Int. Appl., 32pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007015782	A1	20070208	WO 2006-US27559	20060714
<p>W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW</p> <p>RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM</p>				
EP 1913144	A1	20080423	EP 2006-787463	20060714
<p>R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR</p>				
PRIORITY APPLN. INFO.:			US 2005-704075P	P 20050729
			WO 2006-US27559	W 20060714
<p>AB Fibrinogen fusion proteins, methods of making, and methods of using fibrinogen fusion proteins are described. In a preferred embodiment the fibrinogen fusion protein contains a truncated Aα chain of fibrinogen. The Aα chain contains truncation site, which is a deletion of amino acids at its C-terminal region. A non-fibrinogen protein or peptide is C-terminally attached to the truncation site. The fibrinogen fusion proteins can be used alone or mixed with native fibrinogen to form fibrin polymer which can be used for drug delivery or in tissue engineering.</p>				

on treated TCPS were comparable with the control at 24 h, but TNF- α and IL-1 β protein expression in U937 on IPNs was lower at 24 h than on the TCPS control. The results indicate that the tissue-engineering substrate and the bioactive peptides modulate the initial U937 adhesion and the subsequent inflammatory cytokine gene and protein expression.

IT 158622-13-0

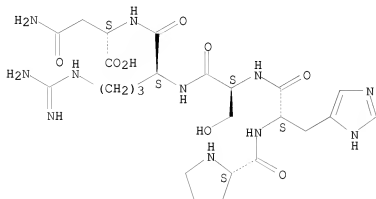
RL: PEP (Physical, engineering or chemical process); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (monocytic U937 adhesion, tumor necrosis factor- α and interleukin-1 β expression in response to gelatin-based networks grafted with arginine-glycine-aspartic acid and proline-histidine-serine-arginine-asparagine oligopeptides)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2007:18927 CAPLUS

DOCUMENT NUMBER: 147:163767

TITLE: Differential angiogenic regulation of experimental colitis

AUTHOR(S): Chidlow, John H., Jr.; Langston, Will; Greer, James J. M.; Ostanin, Dmitry; Abdelbaqi, Maisoun; Houghton, Jeffery; Senthilkumar, Annamalai; Shukla, Deepti; Mazar, Andrew P.; Grisham, Matthew B.; Kevil, Christopher G.

CORPORATE SOURCE: Department of Pathology, Louisiana State University Health Sciences Center-Shreveport, Shreveport, LA, USA

SOURCE: American Journal of Pathology (2006), 169(6), 2014-2030

CODEN: AJPAA4; ISSN: 0002-9440

PUBLISHER: American Society for Investigative Pathology

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Inflammatory bowel diseases (IBDs) are chronic inflammatory disorders of the intestinal tract with unknown multifactorial etiol. that, among other things, result in alteration and dysfunction of the intestinal microvasculature. Clin. observations of increased colon microvascular d.

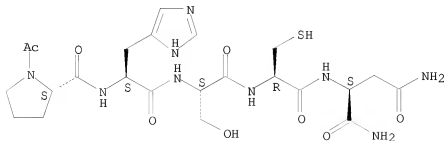
during IBD have been made. However, there have been no reports investigating the physiol. or pathol. importance of angiogenic stimulation during the development of intestinal inflammation. Here we report that the dextran sodium sulfate and CD4+CD45RBhigh T-cell transfer models of colitis stimulate angiogenesis that results in increased blood vessel d. concomitant with increased histopathol., suggesting that the neovascularity contributes to tissue damage during colitis. We also show that leukocyte infiltration is an obligatory requirement for the stimulation of angiogenesis. The angiogenic response during exptl. colitis was differentially regulated in that the production of various angiogenic mediators was diverse between the two models with only a small group of mols. being similarly controlled. Importantly, treatment with the anti-angiogenic agent thalidomide or ATN-161 significantly reduced angiogenic activity and associated tissue histopathol. during exptl. colitis. Our findings identify a direct pathol. link between angiogenesis and the development of exptl. colitis, representing a novel therapeutic target for IBD.

IT 262438-43-7, ATN-161
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (differential angiogenic regulation and gene expression in exptl. inflammatory bowel disease of DSS and CD4+CD45RBhigh T cell transfer mouse models)
 RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 92 THERE ARE 92 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:1226181 CAPLUS
 DOCUMENT NUMBER: 146:20292
 TITLE: Treatment of inflammatory bowel disease (IBD) with anti-angiogenic compounds
 INVENTOR(S): Mazar, Andrew P.; Danese, Silvio; Fiocchi, Claudio
 PATENT ASSIGNEE(S): Attenuon LLC, USA
 SOURCE: PCT Int. Appl., 40pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006124611	A1	20061123	WO 2006-US18463	20060512
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006247631	A1	20061123	AU 2006-247631	20060512
CA 2608332	A1	20061123	CA 2006-2608332	20060512
EP 1904078	A1	20080402	EP 2006-759695	20060512
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BA, HR, MK, YU			
JP 2008540568	T	20081120	JP 2008-511414	20060512
KR 2008029963	A	20080403	KR 2007-729005	20071212
PRIORITY APPLN. INFO.:			US 2005-679977P	P 20050512
			WO 2006-US18463	W 20060512

OTHER SOURCE(S): MARPAT 146:20292

AB Inhibitors of angiogenesis are disclosed as being useful therapeutics for treating various aspects of inflammatory bowel disease, in particular Crohn's Disease. A method for decreasing the magnitude of intestinal inflammation or inflammatory infiltrate in bowel tissue, a method for lowering systemic or gut-associated levels of a proinflammatory cytokine in a subject, a method for reducing microvessel d. in fixed bowel tissue sections and a method for treating an inflammatory bowel disease are disclosed. Preferred agents to achieve the foregoing are pentapeptides that include Pro-His-Ser-Cys-Asn and variants or derivs. thereof.

IT 252229-85-9 252229-85-9D, derivs. 262438-43-7, ATN 161

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

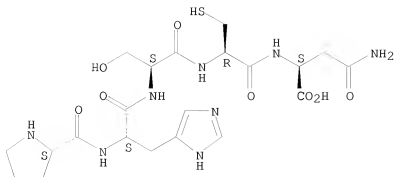
(treatment of inflammatory bowel disease with antiangiogenic compds.)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.

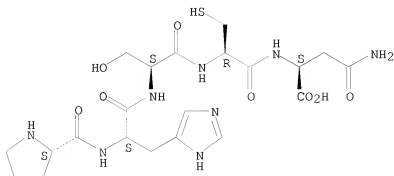


RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



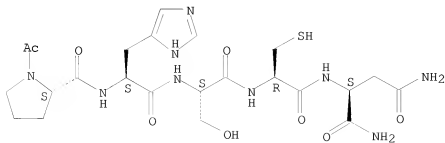
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 252229-34-8 252229-40-6 915814-58-3

RL: PRP (Properties)

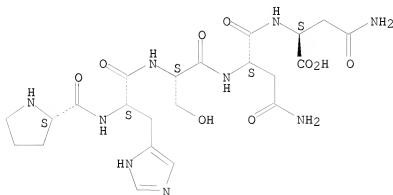
(unclaimed sequence; treatment of inflammatory bowel disease (IBD) with anti-angiogenic compds.)

RN 252229-34-8 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

Absolute stereochemistry.

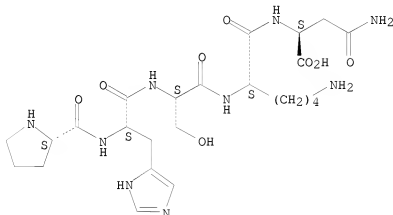


RN 252229-40-6 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.



RN 915814-58-3 CAPLUS

CN Peptide, (Pro-His-Ser-Xaa-Asn) (CA INDEX NAME)

SEQ 1 PHSXN

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1179151 CAPLUS

DOCUMENT NUMBER: 145:495817

TITLE: Modular bioresorbable or biomedical, biologically active supramolecular materials comprising polymers and biologically active agents

INVENTOR(S): Dankers, Patricia Yvonne Wilhelmina; Van Gemert, Gaby Maria Leonarda; Janssen, Henricus Marie; Meijer, Egbert Willem; Bosman, Anton Willem

PATENT ASSIGNEE(S): Suprapolix B. V., Neth.

SOURCE: PCT Int. Appl., 52pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006118461	A2	20061109	WO 2006-NL50107	20060503
WO 2006118461	A3	20071004		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
EP 1877113	A2	20080116	EP 2006-733084	20060503
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
JP 2008539859	T	20081120	JP 2008-509958	20060503
WO 2007058539	A2	20070524	WO 2006-NL50292	20061117
WO 2007058539	A3	20080417		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			

PRIORITY APPLN. INFO.: EP 2005-103764 A 20050504
US 2005-679671P P 20050511
EP 2005-111018 A 20051121
WO 2006-NL50107 W 20060503

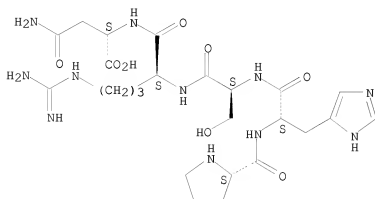
AB The present invention relates to a modular supramol. bioresorbable or biomedical material comprising (i) a polymer comprising at least two 4H-units and (ii) a biol. active compound Optionally, the supramol.

bioresorbable or biomedical material comprises a bioresorbable or biomedical polymer as third component to tune its properties (mech. and bioresorption properties). The supramol. bioresorbable or biomedical material is especially suitable for biomedical applications such as controlled release of drugs, materials for tissue engineering, materials for the manufacture of a prosthesis or an implant, and medical imaging technologies.

IT 158622-13-ODP, pyrimidine-HMDI derivs.
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (modular bioresorbable biomaterials comprising biol. active agents and polymers for controlled drug release, implants and imaging)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 21 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:1030274 CAPLUS

DOCUMENT NUMBER: 145:372367

TITLE: Controlling stem cell destiny with tunable interpenetrating polymer network seeded with growth or differentiation factors

INVENTOR(S): Healy, Kevin E.; Irwin, Beth; Pollock, Jacob, Freas; Schaffer, David; Saha, Krishanu; Li, Ying; Wall, Samuel, Thomas

PATENT ASSIGNEE(S): The Regents of the University of California, USA

SOURCE: PCT Int. Appl., 111pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006105278	A2	20061005	WO 2006-US11616	20060329
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE,			

SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC,
VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,
CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD, TG, BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM

CA 2603116 A1 20061005 CA 2006-2603116 20060329
US 20070026518 A1 20070201 US 2006-394042 20060329
EP 1869169 A2 20071226 EP 2006-748925 20060329

R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL,
BA, HR, MK, YU

PRIORITY APPLN. INFO.: US 2005-666734P P 20050329
WO 2006-US11616 W 20060329

AB The present invention provides a class of interpenetrating polymeric networks (IPNs) and semi-interpenetrating polymeric networks (sIPNs) which include a covalently grafted ligand, such as growth factor or differentiation factor for a stem cell or other ligand. The IPN comprises (a) first cross-linked polymer; and (b) second cross-linked polymer entangled with the first cross-linked polymer. The sIPN comprises (a) a cross-linked polymer; and (b) a linear polymer entangled within the cross-linked polymer. A mech. property of the network can be optimizing while maintaining a biochem. property of the network essentially constant

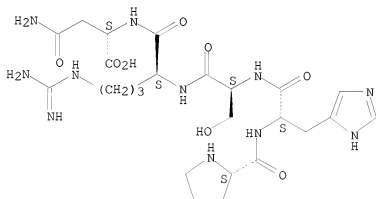
IT 158622-13-0
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(covalently grafted ligand containing; controlling stem cell destiny with tunable interpenetrating polymer network seeded with growth or differentiation factors)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 22 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:968423 CAPLUS

DOCUMENT NUMBER: 146:384

TITLE: A non-RGD-based integrin binding peptide (ATN-161) blocks breast cancer growth and metastasis in vivo

AUTHOR(S): Khalili, Parisa; Arakelian, Ani; Chen, Gaoping;

Plunkett, Marian L.; Beck, Ivy; Parry, Graham C.;
 Donate, Fernando; Shaw, David E.; Mazar, Andrew P.;
 Rabbani, Shafaat A.

CORPORATE SOURCE: Department of Medicine and Oncology, McGill University
 Health Center, Montreal, QC, Can.

SOURCE: Molecular Cancer Therapeutics (2006), 5(9), 2271-2280
 CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Integrins are expressed by numerous tumor types including breast cancer,
 in which they play a crucial role in tumor growth and metastasis. In this
 study, the authors evaluated the ability of ATN-161 (Ac-PHSCN-NH₂), a
 5-mer capped peptide derived from the synergy region of fibronectin that
 binds to $\alpha 5 \beta 1$ and $\alpha v \beta 3$ in vitro, to block breast
 cancer growth and metastasis. Exptl. design: MDA-MB-231 human breast
 cancer cells were inoculated s.c. in the right flank, or cells transfected
 with green fluorescent protein (MDA-MB-231-GFP) were inoculated into the
 left ventricle of female BALB/c nu/nu mice, resulting in the development
 of skeletal metastasis. Animals were treated with vehicle alone or by
 i.v. infusion with ATN-161 (0.05-1 mg/kg thrice a week) for 10 wk. Tumor
 volume was determined at weekly intervals and tumor metastasis was evaluated by
 x-ray, microcomputed tomog., and histol. Tumors were harvested for
 histol. evaluation. Treatment with ATN-161 caused a significant
 dose-dependent decrease in tumor volume and either completely blocked or
 caused a marked decrease in the incidence and number of skeletal as well as
 soft tissue metastases. This was confirmed histol. as well as radiog.
 using x-ray and microcomputed tomog. Treatment with ATN-161 resulted in a
 significant decrease in the expression of phosphorylated mitogen-activated
 protein kinase, microvessel d., and cell proliferation in tumors grown in
 vivo. These studies show that ATN-161 can block breast cancer growth and
 metastasis, and provides a rationale for the clin. development of ATN-161
 for the treatment of breast cancer.

IT 262438-43-7, ATN-161
 RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU
 (Therapeutic use); BIOL (Biological study); USES (Uses)
 (non-RGD-based integrin binding peptide (ATN-161) blocks breast cancer
 growth and metastasis in vivo)

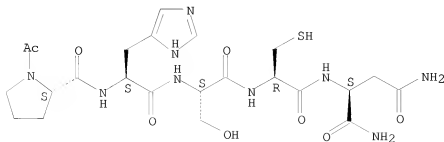
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
 INDEX NAME)

NTE modified

SEQ 1 PHSCN

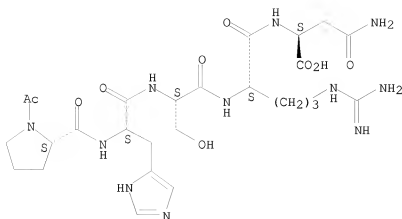
Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 23 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:811964 CAPLUS
DOCUMENT NUMBER: 145:289851
TITLE: Role of Focal Adhesion Kinase and Phosphatidylinositol
3'-Kinase in Integrin Fibronectin Receptor-Mediated,
Matrix Metalloproteinase-1-Dependent Invasion by
Metastatic Prostate Cancer Cells
AUTHOR(S): Zeng, Zhao-Zhu; Jia, Yifeng; Hahn, Nathan J.;
Markwart, Sonja M.; Rockwood, Korrene F.; Livant,
Donna L.
CORPORATE SOURCE: Department of Radiation Oncology and Comprehensive
Cancer Center, University of Michigan, Ann Arbor, MI,
USA
SOURCE: Cancer Research (2006), 66(16), 8091-8099
CODEN: CNREA8; ISSN: 0008-5472
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English
AB α 5 β 1 Integrin interacts with the PHSRN sequence of plasma
fibronectin, causing constitutive invasion by human prostate cancer cells.
Inhibition of this process reduces tumorigenesis and prevents metastasis
and recurrence. In this study, naturally serum-free basement membranes
were used as in vitro invasion substrates. Immunoassays were employed to
dissect the roles of focal adhesion kinase (FAK), phosphatidylinositol
3'-kinase (PI3K), and protein kinase C δ (PKC δ) in
 α 5 β 1-mediated, matrix metalloproteinase-1 (MMP-1)-dependent
invasion by metastatic human DU 145 prostate cancer cells. We found that
a peptide composed of the PHSRN sequence induced rapid FAK phosphorylation
at Tyr397 (Y397), a site whose phosphorylation is associated with kinase
activation. The technique of RNA silencing [small interfering RNA
(siRNA)] confirmed the role of FAK in PHSRN-induced invasion. PHSRN also
induced the association of the p85-regulatory subunit of PI3K with FAK at a
time corresponding to FAK phosphorylation and activation, and maximal PI3K
activity occurred at this same time. The necessity of PI3K activity in
both PHSRN-induced invasion and MMP-1 expression was confirmed by using
specific PI3K inhibitors. By employing a specific inhibitor, Rottlerin,
and by using siRNA, we also found that PKC δ , a PI3K substrate found
in focal adhesions, functions in PHSRN-induced invasion. In addition, the
induction of MMP-1 in PHSRN-treated DU 145 cells was shown by
immunoblotting, and the role of MMP-1 in PHSRN-induced invasion was
confirmed by the use of blocking anti-MMP-1 monoclonal antibody. Finally,
a close temporal correspondence was observed between PHSRN-induced invasion
and PHSRN-induced MMP-1 activity in DU 145 cells.
IT 723297-44-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(PHSRN peptide; MMP-1 in PHSRN-induced invasion was confirmed)
RN 723297-44-7 CAPLUS
CN L-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-arginyl- (9CI) (CA
INDEX NAME)
NTE modified
SEQ 1 PHSRN
Absolute stereochemistry.



REFERENCE COUNT: 55 THERE ARE 55 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 24 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:796211 CAPLUS
DOCUMENT NUMBER: 145:211347
TITLE: Acid addition salts of Ac-PHSCN-NH2
INVENTOR(S): Ternansky, Robert J.; Gladstone, Patricia L.; Mazar,
Andrew P.; Allan, Amy L.
PATENT ASSIGNEE(S): Attenuon, LLC, USA
SOURCE: PCT Int. Appl., 54pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006084016	A1	20060810	WO 2006-US3658	20060201
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GR, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VE, VN, YU, ZA, ZM, ZW			
RN:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
AU 2006210627	A1	20060810	AU 2006-210627	20060201
CA 2596357	A1	20060810	CA 2006-2596357	20060201
EP 1846437	A1	20071024	EP 2006-720137	20060201
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU			
JP 2008528635	T	20080731	JP 2007-553383	20060201
KR 2007100411	A	20071010	KR 2007-719973	20070831
CN 101151273	A	20080326	CN 2006-80009847	20070926
US 20080261892	A1	20081023	US 2008-883584	20080626
PRIORITY APPLN. INFO.:			US 2005-649308P	P 20050201
			WO 2006-US3658	W 20060201

OTHER SOURCE(S): MARPAT 145:211347

AB The invention relates to acid addition salts of Ac-Pro-His-Ser-Cys-Asn-NH₂ (Ac-PHSCN-NH₂), including methods for their synthesis, pharmaceutical compns. containing them used to treat diseases associated with angiogenesis and aberrant vascularization, and methods of preventing degradation of Ac-PHSCN-NH₂ by salt formation. Ac-PHSCN-NH₂ was prepared by the solid-phase method and its stability in solution and the solid phase compared with that of its hydrochloric, methanesulfonic and nitric acid salts.

IT 262438-43-7P 904763-27-5P 904763-42-4P
904763-50-4P 904763-58-2P 904763-66-2P
904763-74-2P 904763-82-2P 904763-90-2P
904763-98-0P 904764-07-4P 904764-15-4P
904764-22-3P 904764-30-3P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation and stability of acetylprolylhistidylserylcysteinylasspartamide salts for use in treating diseases associated with angiogenesis and aberrant vascularization)

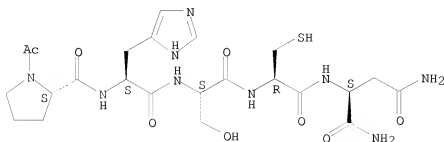
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



RN 904763-27-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

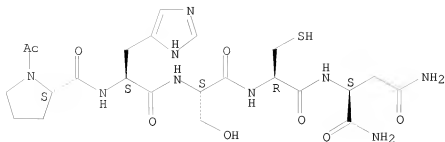
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 76-05-1

CMF C2 H F3 O2



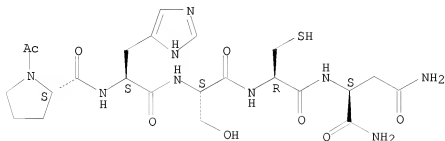
RN 904763-42-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, monohydrochloride (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HCl

RN 904763-50-4 CAPLUS

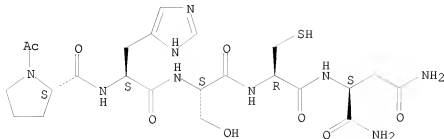
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, monomethanesulfonate (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1
 CRN 262438-43-7
 CMF C23 H35 N9 O8 S
 NTE modified
 SEQ 1 PHSCN

Absolute stereochemistry.



CM 2
 CRN 75-75-2
 CMF C H4 O3 S

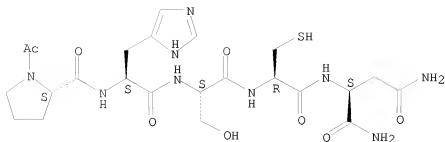


RN 904763-58-2 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
 monoacetate (salt) (9CI) (CA INDEX NAME)

NTE modified
 SEQ 1 PHSCN

CM 1
 CRN 262438-43-7
 CMF C23 H35 N9 O8 S
 NTE modified
 SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 64-19-7
CMF C2 H4 O2



RN 904763-66-2 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(hydroxyacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

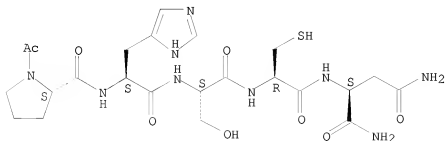
CM 1

CRN 262438-43-7
CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

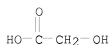
Absolute stereochemistry.



CM 2

CRN 79-14-1

CMF C2 H4 O3



RN 904763-74-2 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, sulfate
(1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

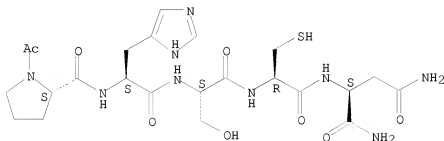
CM 1

CRN 262438-43-7
CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 904763-82-2 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono[(1S,4R)-7,7-dimethyl-2-oxobicyclo[2.2.1]heptane-1-methanesulfonate]
(salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

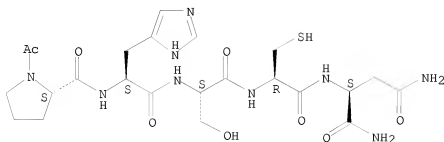
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

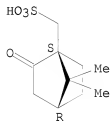


CM 2

CRN 3144-16-9

CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).



RN 904763-90-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(α -hydroxybenzeneacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

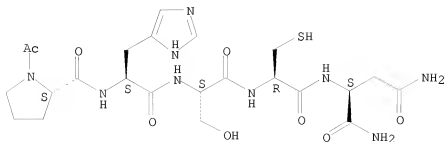
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 90-64-2

CMF C8 H8 O3



RN 904763-98-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
mono(2-hydroxybenzoate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

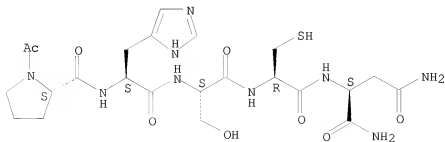
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2
CRN 69-72-7
CMF C7 H6 O3



RN 904764-07-4 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
butanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

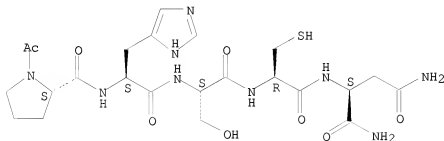
CM 1

CRN 262438-43-7
CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2
CRN 110-15-6
CMF C4 H6 O4

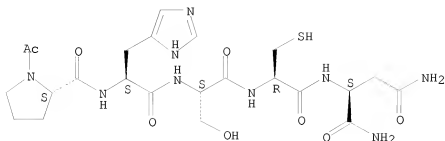
HO₂C-CH₂-CH₂-CO₂H

RN 904764-15-4 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
monohydrobromide (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HBr

RN 904764-22-3 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
 mononitrate (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

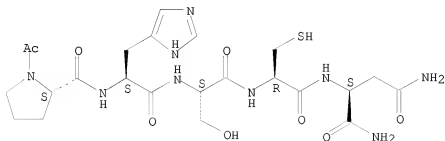
CM 1

CRN 262438-43-7
 CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 7697-37-2
 CMF H N O3



RN 904764-30-3 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-,
 phosphate (1:1) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

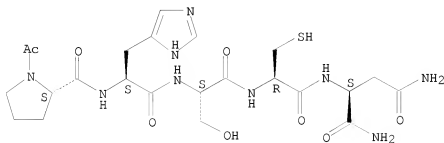
CM 1

CRN 262438-43-7
 CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

CRN 7664-38-2
 CMF H3 O4 P



IT 252229-85-9
 RL: PRP (Properties)
 (unclaimed sequence; acid addition salts of Ac-PHSCN-NH2)

RN 252229-85-9 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

The chemical structure shows a complex peptide derivative. It features a cyclic peptide backbone with a thiol group (HS-) and a carboxylic acid group (CO₂H). The structure includes various amino acid residues, including a threonine (R), a serine (S), and a proline (P). The thiol group is highlighted in red, and the carboxylic acid group is highlighted in blue. The structure is labeled with 'R' and 'S' to indicate stereochemistry.

L4 ANSWER 25 OF 75 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:791029 CAPLUS
 DOCUMENT NUMBER: 145:235787
 TITLE: Improved formulations of anti-angiogenic peptides
 INVENTOR(S): Mazar, Andrew, P.; Heiati, Hashem; Schrier, Jay; Li, Ming; Harris, Scott
 PATENT ASSIGNEE(S): Attenuon, LLC, USA
 SOURCE: PCT Int. Appl., 37pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

AB Described herein are compns./formulations of the Cys-containing anti-angiogenic peptide Pro-His-Ser-Cys-Asn (preferably in its capped form

as Ac-PHSCN-NH₂) or acid addition salts thereof or analog thereof, that comprise at least one addnl. compound that stabilizes the peptide or analog against spontaneous tandem dimerization or higher oligomerization. Preferred formulations include an acidic buffer such as citrate, glycine as an excipient and bulking agent. Optional addnl. components of the formulation are a reducing agent, a non-thiol biocompatible anti-oxidant, a lyoprotectant (typically one or more sugars, one or more amino acids, one or more methylamine, one or more lyotropic salts, and/or one or more polyols). Also provided is an article of manufacture or kit comprising the formulation in solution or in lyophilized form. A method of inhibiting angiogenesis in a subject, comprising administering to the subject the peptide in the above formulation is also disclosed. Ac-Pro-His-Ser-Cys-Asn-NH₂, TFA salt (140 mg, 0.197 mmol) was dissolved in 2 mL of water and Amberlyst A-26 (OH) resin (4.2 meq/g, 2/3 mg, 5.8 equiv) was added. The reaction mixture was stirred at room temperature for 5 min.

The aqueous solution was decanted, the resin was washed twice with distilled water, and

the combined aqueous layers were lyophilized to afford 81 mg (69%) of Ac-PHSCN-NH₂ as a fluffy, white solid 94% monomer, 6% dimer. Ac-PHSCN-NH₂, 50 mg/mL, was formulated in solns. that included the 50mM citrate 50 mg mannitol, and 10 mg sucrose and lyophilized. Stability of various formulations of the peptide was studied.

IT 262438-43-7P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (improved formulations of anti-angiogenic peptides)

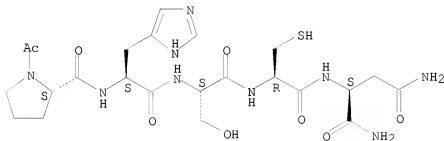
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 904763-42-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (improved formulations of anti-angiogenic peptides)

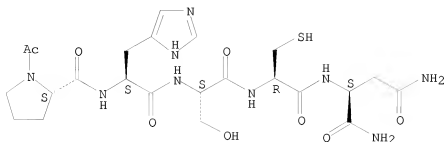
RN 904763-42-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, monohydrochloride (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



● HCl

IT 904763-27-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(improved formulations of anti-angiogenic peptides)

RN 904763-27-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono(trifluoroacetate) (salt) (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

CM 1

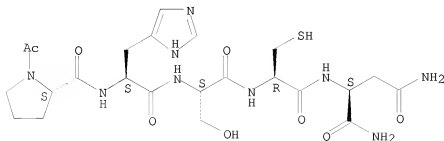
CRN 262438-43-7

CMF C23 H35 N9 O8 S

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



CM 2

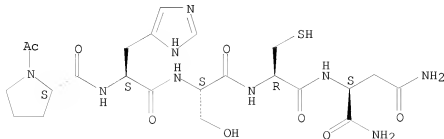
CRN 76-05-1

CMF C2 H F3 O2



L4 ANSWER 26 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2006:693594 CAPLUS
DOCUMENT NUMBER: 146:102
TITLE: Protein and peptide drugs to suppress tumor angiogenesis
AUTHOR(S): Ruegg, Curzio
CORPORATE SOURCE: Lausanne Cancer Center (LCC), Swiss Institute for Experimental Cancer Research (ISREC), Epalinges, CH-1006, Switz.
SOURCE: Delivery of Protein and Peptide Drugs in Cancer (2006), 255-284. Editor(s): Torchilin, Vladimir P. Imperial College Press: London, UK. CODEN: 69IGVE; ISBN: 1-86094-627-5
DOCUMENT TYPE: Conference; General Review
LANGUAGE: English
AB A review describes the features of peptides, polypeptides or proteins classes and report in details the leading compds. of each class. An overview of proteins and peptides with antiangiogenic and antitumor activities is presented.
IT 262438-43-7, ATN-161
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(protein and peptide drugs such as ATN-161 with antitumor and antiangiogenic activity might be useful therapeutic option for treatment of human cancer)
RN 262438-43-7 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)
NTE modified
SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 132 THERE ARE 132 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 27 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:602341 CAPLUS

DOCUMENT NUMBER: 145:321282

TITLE: Branched peptide-amphiphiles as self-assembling coatings for tissue engineering scaffolds

AUTHOR(S): Harrington, Daniel A.; Cheng, Earl Y.; Guler, Mustafa O.; Lee, Leslie K.; Donovan, Jena L.; Claussen, Randal C.; Stupp, Samuel I.

CORPORATE SOURCE: Department of Materials Science and Engineering, Northwestern University, Evanston, IL, 60208, USA

SOURCE: Journal of Biomedical Materials Research, Part A (2006), 78A(1), 157-167

CODEN: JBMRRH; ISSN: 1549-3296

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An important challenge in regenerative medicine is the design of suitable bioactive scaffold materials that can act as artificial extracellular matrices. We reported previously on a family of peptide-amphiphile (PA) mols. that self-assemble into high-aspect ratio nanofibers under physiol. conditions, and can display bioactive peptide epitopes along each nanofiber's periphery. One type of PA displays its epitope at a branched site using a lysine dendron, a mol. feature that improves epitope availability on the nanofiber surface. In this work, we describe the application of these branched PA (b-PA) systems as self-assembling coatings for fiber-bonded poly(glycolic acid) scaffolds. B-PAs bearing variations of the RGDS adhesion epitope from fibronectin were shown by elemental anal. to coat repeatably onto fiber scaffolds. The retention of supramol. organization after coating on the scaffold was demonstrated through spectroscopic identification of β -sheet structures and the close association of hydrophobic tails in a model pyrene-containing PA system. Primary human bladder smooth muscle cells demonstrated greater initial adhesion to b-PA-functionalized scaffolds than to bare scaffolds or to those coated with linear PAs. This strategy of mol. design and coating may have potential application in bladder tissue regeneration.

IT 854619-88-8

RL: BSU (Biological study, unclassified); PRP (Properties); THU

(Therapeutic use); BIOL (Biological study); USES (Uses)

(branched peptide-amphiphiles as self-assembling coatings for tissue engineering scaffolds)

RN 854619-88-8 CAPLUS

CN L-Lysinamide, N6-(L-prolyl-L-histidyl-L-seryl-L-arginyl-L-asparaginyl)-L-lysyl-N6-[N6-(L-arginylglycyl-L- α -aspartyl-L-seryl)-L-lysyl]-L-lysyl-L-leucyl-L-leucyl-L-leucyl-L-alanyl-L-alanyl-L-alanyl-N6-(1-oxohexadecyl)-(9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

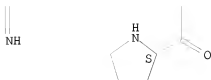
SEQ 1 KKKLLAAAK

1 PHSRN

1 RGDS

1 K

Absolute stereochemistry.



REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 28 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:507586 CAPLUS

DOCUMENT NUMBER: 145:448676

TITLE: Phase 1 trial of the antiangiogenic peptide ATN-161 (Ac-PHSCN-NH2), a beta integrin antagonist, in patients with solid tumors

AUTHOR(S): Cianfrocca, M. E.; Kimmel, K. A.; Gallo, J.; Cardoso, T.; Brown, M. M.; Hudes, G.; Lewis, N.; Weiner, L.; Lam, G. N.; Brown, S. C.; Shaw, D. E.; Mazar, A. P.; Cohen, R. B.

CORPORATE SOURCE: Fox Chase Cancer Center, Philadelphia, PA, 19111, USA
SOURCE: British Journal of Cancer (2006), 94(11), 1621-1626
CODEN: BJCAAI; ISSN: 0007-0920

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB To evaluate the toxicity, pharmacol. and biol. properties of ATN-161, a five -amino-acid peptide derived from the synergy region of fibronectin, adult patients with advanced solid tumors were enrolled in eight sequential dose cohorts (0.1-16 mg kg⁻¹), receiving ATN-161 administered as a 10-min infusion thrice weekly. Pharmacokinetic sampling of blood and

urine over 7 h was performed on Day 1. Twenty-six patients received from 1 to 14 4-wk cycles of treatment. The total number of cycles administered to all patients was 86, without dose-limiting toxicities. At dose levels above 0.5 mg kg⁻¹, mean total clearance and volume of distribution showed dose-independent pharmacokinetics (PKs). At 8.0 and 16.0 mg kg⁻¹, clearance of ATN-161 was reduced, suggesting saturable PKs. Dose escalation was halted at 16 mg kg⁻¹ when drug exposure (area under the curve) exceeded that associated with efficacy in animal models. There were no objective responses. Six patients received more than four cycles of treatment (>112 days). Three patients received 10 or more cycles (≥280 days). ATN-161 was well tolerated at all dose levels. Approx., 1/3 of the patients in the study manifested prolonged stable disease. These findings suggest that ATN-161 should be investigated further as an antiangiogenic and antimetastatic cancer agent alone or with chemotherapy.

IT 262438-43-7, ATN-161

RL: PAC (Pharmacological activity); PKT (Pharmacokinetics); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(antiangiogenic peptide ATN-161 was well tolerated, showed rapid clearance from plasma and Vss indicating high tissue distribution, very short half life but suppressed tumor growth with no objective clin. response in solid tumor patient)

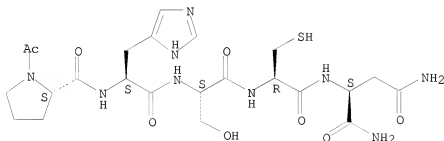
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 29 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:468539 CAPLUS

DOCUMENT NUMBER: 145:140599

TITLE: Presentation of RGDS Epitopes on Self-Assembled Nanofibers of Branched Peptide Amphiphiles

AUTHOR(S): Guler, Mustafa O.; Hsu, Lorraine; Soukasene, Stephen; Harrington, Daniel A.; Hulvat, James F.; Stupp, Samuel I.

CORPORATE SOURCE: Department of Chemistry, Department of Materials Science and Engineering, Feinberg School of Medicine, Institute for BioNanotechnology in Medicine, Northwestern University, Evanston, IL, 60208, USA

SOURCE: Biomacromolecules (2006), 7(6), 1855-1863
CODEN: BOMAF6; ISSN: 1525-7797

PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Branched peptide amphiphile (PA) mols. bearing biol. epitopes were designed and synthesized using orthogonal protecting group chemical on amine groups at lysine residues. These mols. self-assemble into high-aspect-ratio cylindrical nanofibers, and their branched architecture enhances accessibility of epitopes for protein binding and also allows the presentation of more than one epitope in a single mol. The RGDS cell adhesion epitope was used as a model bioactive signal on PA mols. for potential biomedical applications. Aggregation of the branched PA mols. into nanofibers was demonstrated by TEM and through shifts in the protonation profiles of peripheral amines. These systems also formed self-supporting gels in the presence of physiol. fluids and other biol. relevant macromols. such as synovial fluid and DNA, an important property for their potential use in medicine. Fluorescence anisotropy measurements on the PAs with tryptophan residues were performed to examine the effect of branching on packing and mobility of the peptides in the self-assembled nanofibers. The mobility of tryptophan residues was observed to be restricted upon packing of PA mols. into nanofibers. However, relative to linear analogs, branched mols. retain more mobility in the supramol. aggregates.

IT 854619-88-8P

RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses) (presentation of RGDS epitopes on self-assembled nanofibers of branched peptide amphiphiles)

RN 854619-88-8 CAPLUS

CN L-Lysinamide, N6-(L-prolyl-L-histidyl-L-seryl-L-arginyl-L-asparaginy)-L-lysyl-N6-[N6-(L-arginylglycyl-L- α -aspartyl-L-seryl)-L-lysyl]-L-lysyl-L-leucyl-L-leucyl-L-leucyl-L-alanyl-L-alanyl-L-alanyl-N6-(1-oxohexadecyl)-(9CI) (CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 KKLLAAAK

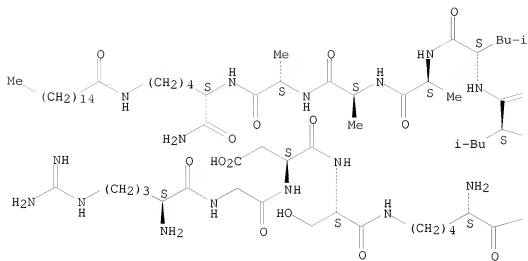
1 PHSRN

1 RGDS

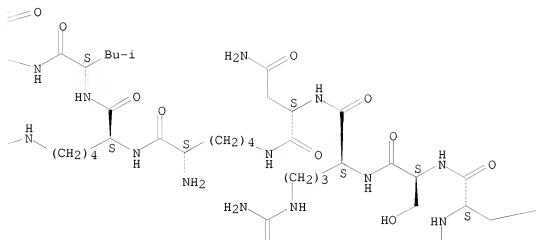
1 K

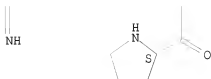
Absolute stereochemistry.

PAGE 1-A



PAGE 1-B





REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 30 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:353198 CAPLUS

DOCUMENT NUMBER: 145:152476

TITLE: Effect of RGD secondary structure and the synergy site PHSRN on cell adhesion, spreading and specific integrin engagement

AUTHOR(S): Ochsenhirt, Sarah E.; Kokkoli, Efrosini; McCarthy, James B.; Tirrell, Matthew

CORPORATE SOURCE: Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, 55455, USA

SOURCE: Biomaterials (2006), 27(20), 3863-3874

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The relationship between the form of cell adhesion, ligand presentation, and cell receptor function was characterized using model Langmuir-Blodgett supported films, containing lipid-conjugated peptide ligands, in which isolated variables of the ligand presentation were systematically altered. First, the conformation of an adhesive Arginine-Glycine-Aspartic acid

(RGD) peptide was varied by synthesizing linear and looped RGD peptide-containing amphiphiles and subsequently measuring the impact on the function of human umbilical vein endothelial cells. Secondly, the contribution of non-contiguous ligands to cellular engagement was assessed using multi-component biomimetic films. The peptide amphiphiles were composed of fibronectin-derived headgroups-GRGDSP, and its synergy site Pro-His-Ser-Arg-Asn (PHSRN)-attached to hydrocarbon tails. The peptide amphiphiles were diluted using polyethylene glycol (PEG) amphiphiles, where PEG inhibited non-specific cell adhesion. Cells adhered and spread on GRGDSP/PEG systems in a dose-dependent manner. The presentation of GRGDSP influenced integrin cell surface receptor specificity. Results demonstrated that β 1-containing integrins mediated adhesion to the linear GRGDSP presentation to a greater extent than did the α v β 3 integrin, and looped GRGDSP preferentially engaged α v β 3. GRGDSP/PHSRN/PEG mixts. that closely mimicked the RGD-PHSRN distance in fibronectin, enhanced cell spreading over their two-component analogs. This study demonstrated that controlling the microenvironment of the cell was essential for biomimetics to modulate specific binding and subsequent signaling events.

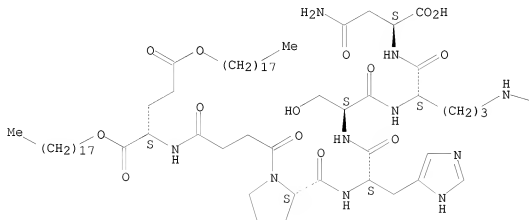
IT 898799-07-0D, conjugates with poly(ethylene glycol)
 RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (effect of RGD secondary structure and the synergy site PHSRN on cell adhesion, spreading and specific integrin engagement)
 RN 898799-07-0 CAPLUS
 CN L-Asparagine, 1-[4-[(1S)-4-(octadecyloxy)-1-[(octadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl-(9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 31 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2006:339703 CAPLUS
 DOCUMENT NUMBER: 144:381976
 TITLE: Anticancer compounds and methods
 INVENTOR(S): Livant, Donna
 PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA
 SOURCE: U.S. Pat. Appl. Publ., 87 pp.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

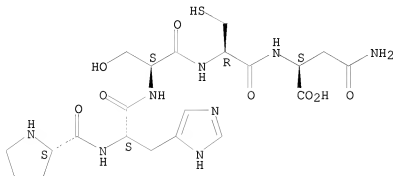
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20060078535	A1	20060413	US 2004-964093	20041013
AU 2005295915	A1	20060427	AU 2005-295915	20051011
CA 2584030	A1	20060427	CA 2005-2584030	20051011
WO 2006044330	A2	20060427	WO 2005-US36442	20051011
WO 2006044330	A3	20060608		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
EP 1809266	A2	20070725	EP 2005-803159	20051011
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008515975	T	20080515	JP 2007-536781	20051011
PRIORITY APPLN. INFO.:			US 2004-964093	A 20041013
			WO 2005-US36442	W 20051011
AB The present invention relates to the treatment of cancer, to the testing of cancer cells for their ability to invade tissues and cause metastases, and to the identification and use of drugs to inhibit tumor invasion and growth. In one embodiment, the present invention contemplates a composition comprising a dendrimer and at least one peptide comprising an amino acid sequence PHSCN attached to said dendrimer, wherein the dendrimer comprises				

branches. In one embodiment, the dendrimer comprises polylysine. In one embodiment, the composition further comprises a chemotherapeutic agent attached to the dendrimer. In one embodiment, the chemotherapeutic agent comprises methotrexate. In another embodiment, the chemotherapeutic agent comprises boron. In another embodiment, the chemotherapeutic agent comprises an antibody.

IT 252229-85-9D, conjugates with dendrimers and chemotherapeutic agents
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (anticancer compds. and methods using dendrimers and peptides and attached chemotherapeutic agents)
 RN 252229-85-9 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

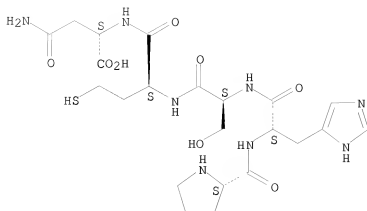
Absolute stereochemistry.



IT 252230-05-0
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (metastasis inhibition by; anticancer compds. and methods using dendrimers and peptides and attached chemotherapeutic agents)
 RN 252230-05-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-homocysteinyl- (9CI) (CA INDEX NAME)

SEQ 1 PHSXN

Absolute stereochemistry.



IT 158622-13-0

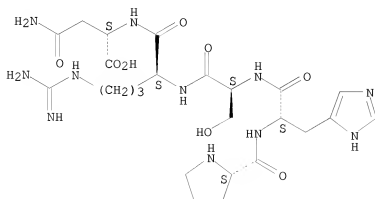
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(metastasis-inducing peptide; anticancer compds. and methods using
dendrimers and peptides and attached chemotherapeutic agents)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-argininyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



IT 252229-34-8 252229-40-6 252229-85-9

RL: PRP (Properties)

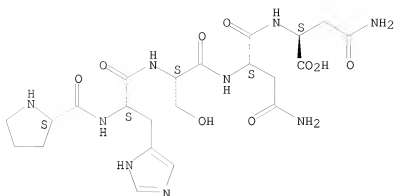
(unclaimed sequence; anticancer compds. and methods)

RN 252229-34-8 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

Absolute stereochemistry.

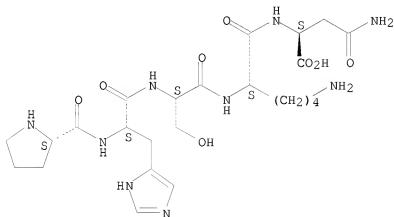


RN 252229-40-6 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.

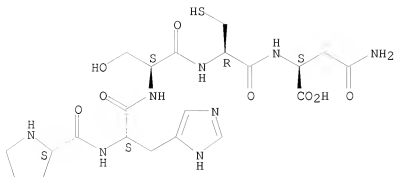


RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



L4 ANSWER 32 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2006:164104 CAPLUS

DOCUMENT NUMBER: 144:398097

TITLE: Design of a Novel Fibronectin-Mimetic

AUTHOR(S): Peptide-Amphiphile for Functionalized Biomaterials
Mardilovich, Anastasia; Craig, Jennifer A.; McCammon,
Matthew Q.; Garg, Ashish; Kokkoli, Efrosini

CORPORATE SOURCE: Department of Chemical Engineering and Materials
Science, and Department of Biomedical Engineering,
University of Minnesota, Minneapolis, MN, 55455, USA
SOURCE: Langmuir (2006), 22(7), 3259-3264
CODEN: LANGD5; ISSN: 0743-7463

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The interaction of the $\alpha 5 \beta 1$ integrin with its ligand, fibronectin, supports numerous adhesive functions and has an important role in health and disease. In recent years, there has been a considerable effort in designing fibronectin-mimetic peptides to target the integrin. However, to date, the therapeutic use of these peptides has been limited, as they cannot accurately mimic fibronectin's binding affinity for $\alpha 5 \beta 1$. A peptide-amphiphile (PRb) was synthesized with a peptide headgroup composed of four building blocks: a spacer; RGDSP, the primary recognition site for $\alpha 5 \beta 1$; PHSRN, the synergy binding site; and a linker. The linker was designed to mimic two important criteria: the distance and the hydrophobicity/hydrophilicity between PHSRN and RGD in fibronectin. Human umbilical vein endothelial cells were seeded on different substrates and evaluated in terms of adhesion, spreading, specificity, cytoskeleton organization, focal adhesions, and secretion of extracellular fibronectin. This peptide was shown to perform comparably to fibronectin, indicating that a biomimetic approach can result in the design of novel peptides with therapeutic potential for biomaterial functionalization.

IT 552314-28-0

RL: BSU (Biological study, unclassified); PRP (Properties); THU
(Therapeutic use); BIOL (Biological study); USES (Uses)
(design of a novel fibronectin-mimetic peptide-amphiphile for
functionalized biomaterials)

RN 552314-28-0 CAPLUS

CN L-Asparagine, 1-[4-[[[(1S)-4-(hexadecyloxy)-1-[(hexadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl]-
(CA INDEX NAME)

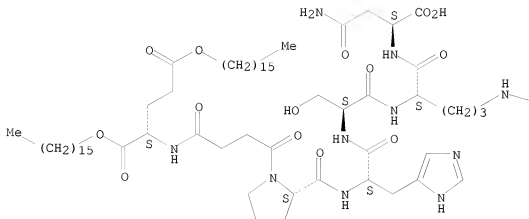
NTE multichain
modified (modifications unspecified)

SEQ 1 PHSRN

1 E

Absolute stereochemistry.

PAGE 1-A



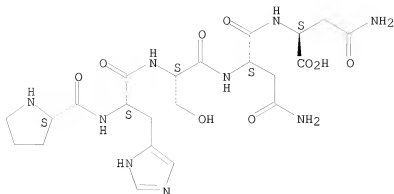
PAGE 1-B



REFERENCE COUNT: 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2005:1333892 CAPLUS
DOCUMENT NUMBER: 144:74820
TITLE: Hyaluronate-fibronectin peptide-based extracellular matrix for promotion of wound healing
INVENTOR(S): Clark, Richard A.; Prestwich, Glenn
PATENT ASSIGNEE(S): The Research Foundation of State University of New York At Stony Brook, USA
SOURCE: U.S. Pat. Appl. Publ., 52 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

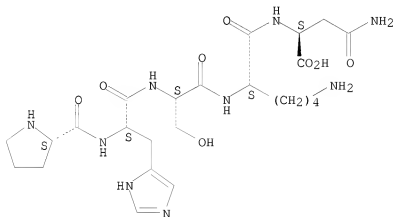
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----



RN 252229-40-6 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.



L4 ANSWER 34 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:1311165 CAPLUS
 DOCUMENT NUMBER: 144:57679
 TITLE: Bifunctional-modified polymer hydrogels
 INVENTOR(S): Kao, Weiyan John; Phillips, Jeffrey M.; Li, Jing;
 Lok, David; Gundloori, Rathna
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 49 pp., Cont.-in-part of U.S.
 No. 128,198.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050276858	A1	20051215	US 2005-93531	20050330

US 20030083389	A1	20030501	US 2002-128198	20020423
US 20060100369	A1	20060511	US 2005-273393	20051114
PRIORITY APPLN. INFO.:			US 2001-285782P	P 20010423
			US 2002-128198	A2 20020423

AB Disclosed are hydrogels wherein a polymer matrix is modified to contain a bifunctional poly(alkylene glycol) mol. covalently bonded to the polymer matrix. The hydrogels can be cross-linked using, for example, glutaraldehyde. The hydrogels may also be crosslinked via an interpenetrating network of a photopolymerizable acrylates. The hydrogels may also be modified to have pharmacol.-active agents covalently bonded to the poly(alkylene glycol) mols. or entrained within the hydrogel. Living cells may also be entrained within the hydrogels. Thus, hydrogels were prepared by heating 10% solns. of gelatin, 10% PEG dialdehyde-modified gelatin (PG), 40% ethylenediaminetetraacetic dianhydride (EDTAD)-modified gelatin (EG), and 60% PEG dialdehyde-modified-EDTAD-modified gelatin (P/EG) at 70° and crosslinking with 0.1% or 0.01% glutaraldehyde. The swelling/degradation and in vitro drug release (chlorhexidine digluconate) studies of these hydrogels were conducted. The results showed that gelatin backbone modifications and crosslinking agent selection affected the swelling/degradative kinetics of modified gelatin-based hydrogels. By modulating these material properties and monitoring how these changes affect drug release kinetics, a non-immunogenic, bioresorbable cell/drug carrier matrix can be made that will have desirable release characteristics based on such considerations as the drug being used in the formulation, the length of the treatment, and the condition being treated, and the location of the implanted matrix. Also, hydrogels grafted with fibronectin-derived peptides mediated extensive foreign body giant cell (FBGC) coverage that increased with increasing implantation time. Specifically, surfaces grafted with G3RGDG6PHSRNG showed the highest FBGC coverage at about 90% of the total sample area when compared with other sample types and controls at 70 days postimplantation, indicating that the RGD motif, specifically in the configuration of G3RGDG or G3PHSRNG6RGDG, but not G3RGDG6PHSRNG, modulates a rapid macrophage fusion to form FBGCs. This phenomenon was observed at the early stage of implantation (i.e., within 4 days of implantation).

IT 871038-82-3P
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
 (hydrogels comprising bifunctional polymers and interpenetrating networks as carriers for biol. active agents)

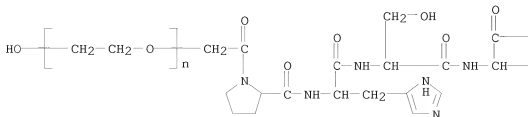
RN 871038-82-3 CAPLUS

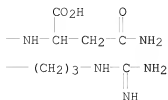
CN Poly(oxy-1,2-ethanediyl), α -hydro- ϕ -hydroxy-, 1-ether with hydroxyacetyl-L-prolyl-L-histidyl-L-seryl-L-arginyl-L-asparagine (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 PHSRN

PAGE 1-A





IT 158622-13-0

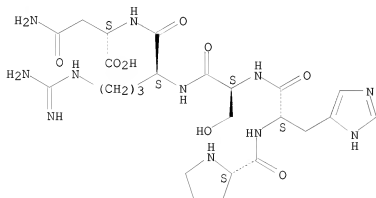
RL: RCT (Reactant); RACT (Reactant or reagent)
 (hydrogels comprising bifunctional polymers and interpenetrating
 networks as carriers for biol. active agents)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 35 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:1266841 CAPLUS

DOCUMENT NUMBER: 144:439725

TITLE: Effect of physicochemical modification on the
 biodistribution and tumor accumulation of HPMA
 copolymers

AUTHOR(S): Lammers, Twan; Kuehnlein, Rainer; Kissel, Maria; Subr,
 Vladimir; Etrych, Tomas; Pola, Robert; Pechar, Michal;
 Ulbrich, Karel; Storm, Gert; Huber, Peter; Peschke,
 Peter

CORPORATE SOURCE: Department of Innovative Cancer Diagnosis and Therapy,
 Clinical Cooperation Unit Radiotherapeutic Oncology,
 German Cancer Research Center, Heidelberg, 69120,
 Germany

SOURCE: Journal of Controlled Release (2005), 110(1), 103-118
 CODEN: JCREEC; ISSN: 0168-3659

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Copolymers of N-(2-hydroxypropyl)methacrylamide (HPMA) are prototypic and

well-characterized polymeric drug carriers that are being broadly implemented in the delivery of anticancer therapeutics. To better predict the in vivo potential of the copolymers and to describe the biodistributional consequences of functionalization, 13 physicochem. different HPMA copolymers were synthesized, varying in mol. weight and in the nature and amount of functional groups introduced. Upon radiolabeling, the copolymers were injected i.v., and their circulation kinetics, tissue distribution and tumor accumulation were monitored in rats bearing s.c. Dunning AT1 tumors. It was found that increasing the average mol. weight of

HPMA

copolymers resulted in prolonged circulation times and in increased tumor concns. Conjugation of carboxyl and hydrazide groups, as well as introduction of spacer, drug and peptide moieties reduced the long-circulating properties of the copolymers and as a result, lower levels were found in tumors and in all organs other than kidney. Interestingly, however, in spite of the reduced (absolute) tumor concns., hardly any reduction in the relative levels localizing to tumors was found. Tumor-to-organ ratios were comparable to unmodified control for the majority of chemical modified copolymers, indicating that functionalization does not necessarily affect the tumor targeting ability of the copolymers and suggesting that HPMA copolymer-based drug delivery systems may prove to be attractive tools for more effectively treating various forms of advanced solid malignancy.

IT 262438-43-7D, reaction products with hydroxypropylacrylamide polymers

RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(effect of physicochem. modification on biodistribution and tumor accumulation of HPMA copolymers)

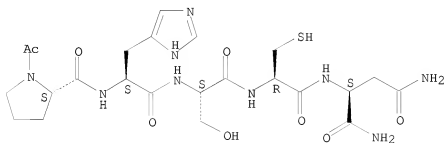
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 36 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:597112 CAPLUS

DOCUMENT NUMBER: 143:272322

TITLE: A modular and supramolecular approach to bioactive scaffolds for tissue engineering

AUTHOR(S): Dankers, Patricia Y. W.; Harmsen, Martin C.; Brouwer, Linda A.; Van Luyn, Marja J. A.; Meijer, E. W.

CORPORATE SOURCE: Laboratory of Macromolecular and Organic Chemistry,
Eindhoven University of Technology, Eindhoven,
NL-5600, Neth.

SOURCE: Nature Materials (2005), 4(7), 568-574
CODEN: MMAACR; ISSN: 1476-1122

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Bioactive polymeric scaffolds are a prerequisite for the ultimate formation of functional tissues. Here, we showed that supramol. polymers based on quadruple hydrogen bonding ureido-pyrimidinone (UPy) moieties are eminently suitable for producing such bioactive materials owing to their low-temperature processability, favorable degradation and biocompatible behavior. Particularly, the reversible nature of the hydrogen bonds allows for a modular approach to gaining control over cellular behavior and activity both in vitro and in vivo. Bioactive materials are obtained by simply mixing UPy-functionalized polymers with UPy-modified biomols. Low-mol.-weight bis-UPy-oligocaprolactones with cell adhesion promoting UPy-Gly-Arg-Gly-Asp-Ser (UPy-GRGDS) and the synergistic UPy-Pro-His-Ser-Arg-Asn (UPy-PHSRN) peptide sequences are synthesized and studied. The in vitro results indicated strong and specific cell binding of fibroblasts to the UPy-functionalized bioactive materials containing both UPy-peptides. An even more striking effect was seen in vivo where the formation of single giant cells at the interface between bioactive material and tissue was triggered.

IT 863770-46-1P
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(supramol. structure containing ureido-pyrimidinone and oligocaprolactone and bioactive peptides as scaffolds for tissue engineering)

RN 863770-46-1 CAPLUS

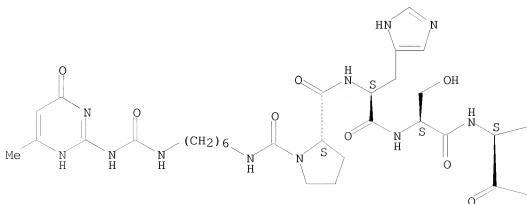
CN L-Asparagine, 1-[[[6-[[[(1,6-dihydro-4-methyl-6-oxo-2-pyrimidinyl)amino]carbonyl]amino]hexyl]amino]carbonyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

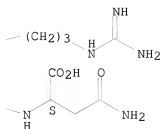
NTE modified (modifications unspecified)

SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 37 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:547611 CAPLUS

DOCUMENT NUMBER: 143:65507

TITLE: Branched peptide amphiphiles, related epitope compounds and self assembled structures thereof

INVENTOR(S): Stupp, Samuel I.; Guler, Mustafa O.

PATENT ASSIGNEE(S): Northwestern University, USA

SOURCE: PCT Int. Appl., 30 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

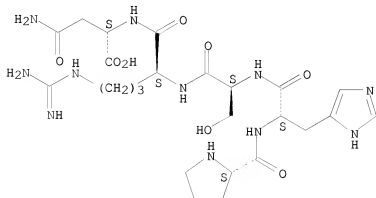
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005056576	A2	20050623	WO 2004-US40546	20041206
WO 2005056576	A3	20060119		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004297211	A1	20050623	AU 2004-297211	20041206
CA 2549391	A1	20050623	CA 2004-2549391	20041206
US 20050208589	A1	20050922	US 2004-5314	20041206
US 7452679	B2	20081118		
EP 1696944	A2	20060906	EP 2004-817012	20041206
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
CN 1905893	A	20070131	CN 2004-80040651	20041206

JP	2007535493	T	20071206	JP	2006-542793	20041206
MX	2006PA06387	A	20060904	MX	2006-PA6387	20060605
IN	2006CN01970	A	20070608	IN	2006-CN1970	20060605
KR	2007004561	A	20070109	KR	2006-713465	20060704
PRIORITY APPLN. INFO.:				US	2003-527442P	P 20031205
				WO	2004-U540546	W 20041206
AB	<p>Branched peptide amphiphilic compds. incorporating one or more residues providing a pendant amino group for coupling one or more epitope sequences thereto, such compds. and related compns. for enhanced epitope presentation are discussed. The branched peptide amphiphiles can self assemble into nanofibers under physiol. pH conditions. The branched peptide amphiphiles self assemble into cylindrical micelles which form self-supporting gel samples. The peptide amphiphiles can be used in medial applications with different epitopes chosen according to their desired functions. The peptide amphiphiles and self-assembled micelles thereof can be used in tissue engineering, tissue reconstruction, synthetic vaccine design, drug delivery, magnetic resonance imaging, and sensor applications.</p>					
IT	<p>158622-13-0 854619-88-8 RL: BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study) (branched peptide amphiphiles and self-assembled micelles thereof)</p>					
RN	158622-13-0 CAPLUS					
CN	L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)					

SEQ 1 PHSRN

Absolute stereochemistry.



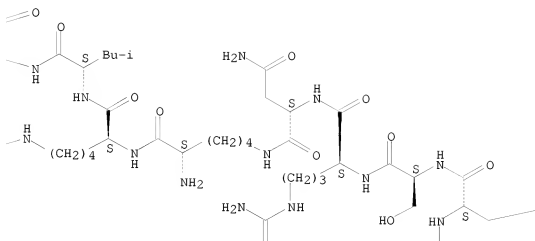
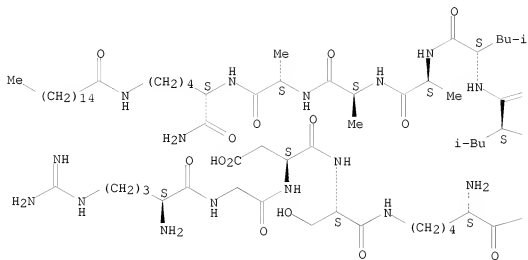
RN 854619-88-8 CAPLUS
 CN L-Lysinamide, N6-(L-prolyl-L-histidyl-L-seryl-L-arginyl-L-asparaginyl)-L-
 lysyl-N6-[N6-(L-arginylglycyl-L- α -aspartyl-L-seryl)-L-lysyl]-L-lysyl-
 L-leucyl-L-leucyl-L-leucyl-L-alanyl-L-alanyl-L-alanyl-N6-(1-oxohexadecyl)-
 (9CI) (CA INDEX NAME)

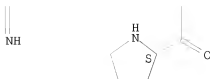
```
NTE multichain
modified (modifications unspecified)
```

SEQ 1 KKL~~LL~~AAAK

1 PHSRN

1 BGDS





L4 ANSWER 38 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:409367 CAPLUS
 DOCUMENT NUMBER: 142:469378
 TITLE: Hydrogel providing cell-specific ingrowth
 INVENTOR(S): Zilla, Peter; Davies, Neil; Dower, Terri; Bracher, Mona
 PATENT ASSIGNEE(S): Medtronic, Inc., USA
 SOURCE: PCT Int. Appl., 103 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005042046	A1	20050512	WO 2004-US36591	20041103
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,
 AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO,
 SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
 NE, SN, TD, TG

CA 2544779 A1 20050512 CA 2004-2544779 20041103
 US 20050119762 A1 20050602 US 2004-980989 20041103
 EP 1691854 A1 20060823 EP 2004-800661 20041103

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS

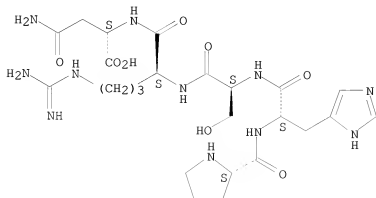
PRIORITY APPLN. INFO.: US 2003-517113P P 20031103
 WO 2004-US36591 W 20041103

AB A polymeric biomaterial that facilitates cell-specific ingrowth is disclosed. The polymeric biomaterial encourages the ingrowth of certain cell types while reducing the ingrowth of undesirable cell types. This activity encourages proper integration of prosthetic implants or scaffolds utilizing this biomaterial by discouraging encapsulation or the accumulation of inflammatory cells such as macrophages, while encouraging infiltration by desirable cells such as endothelial or smooth muscle cells. Short peptide sequences are included in a polymeric biomaterial that result in complementary activities. Peptide sequences that are specifically cleaved by proteases found within preferred cells are used to cross-link the biomaterial and lead to degradation by those cells. Peptide sequences taken from proteins involved in cell adhesion can also be attached to the biomaterial to encourage adhesion by preferred cells. Combined use of both peptides in the polymeric biomaterial provides both specific adhesion and selective ingrowth.

IT 158622-13-0
 RL: DEV (Device component use); PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogel providing cell-specific immigration for prosthetic integration)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

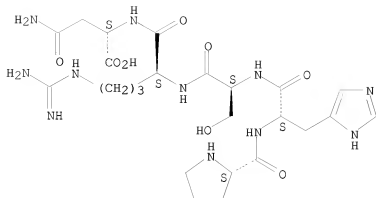
Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ACCESSION NUMBER: 2005:386345 CAPLUS
 DOCUMENT NUMBER: 143:455160
 TITLE: The use of atomic force microscopy in characterizing
 ligand-receptor ($\alpha 5\beta 1$ integrin)
 interactions
 AUTHOR(S): Kokkoli, Efrosini; Mardilovich, Anastasia
 CORPORATE SOURCE: Department of Chemical Engineering and Materials
 Science, University of Minnesota, Minneapolis, MN,
 55455, USA
 SOURCE: ACS Symposium Series (2005), 897(Applications of
 Scanned Probe Microscopy to Polymers), 182-192
 CODEN: ACSMC8; ISSN: 0097-6156
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 AB A biomimetic system was used to study interactions of the $\alpha 5\beta 1$
 receptor with its ligand with an atomic force microscope (AFM).
 Bioartificial membranes, which display peptides that mimic the cell
 adhesion domain of the extracellular matrix protein fibronectin, are
 constructed from peptide-amphiphiles. A novel peptide-amphiphile was
 designed that contains both GRGDSP (Gly-Arg-Gly-Asp-Ser-Pro, the primary
 recognition site for $\alpha 5\beta 1$) and PHSRN (Pro-His-Ser-Arg-Asn, the primary
 synergy binding site for $\alpha 5\beta 1$) sequences in a single peptide
 formulation, separated by a spacer. The strength of the PHSRN synergistic
 effect depends on the accessibility of this sequence to $\alpha 5\beta 1$
 integrins. The interaction measured with the immobilized $\alpha 5\beta 1$
 integrins and GRGDSP peptide-amphiphiles is found to be specifically
 related to the integrin-peptide binding. It is affected by divalent
 cations in a way that accurately mimics the adhesion function of the
 $\alpha 5\beta 1$ receptor. The dissociation of single $\alpha 5\beta 1$ -GRGDSP
 pairs under loading rates of 1-305 nN/s revealed the presence of two
 activation energy barriers in the unbinding process. The high-strength
 regime above 59 nN/s maps the inner barrier along the direction of the
 force. Below 59 nN/s a low strength regime appears with an outer barrier
 and a much slower transition rate that defines the dissociation rate
 (off-rate) in the absence of force ($k_{off} = 0.015 \text{ s}^{-1}$).
 IT 158622-13-0
 RL: PEP (Physical, engineering or chemical process); PRP (Properties); PYP
 (Physical process); PROC (Process)
 (use of atomic force microscopy in characterizing ligand-receptor
 ($\alpha 5\beta 1$ integrin) interactions)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)
 SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2005:367663 CAPLUS

DOCUMENT NUMBER: 142:445295

TITLE: ILK mediates actin filament rearrangements and cell migration and invasion through PI3K/Akt/Rac1 signaling
AUTHOR(S): Qian, Yong; Zhong, Xiaosong; Flynn, Daniel C.; Zheng, Jenny Z.; Qiao, Meng; Wu, Chuanyue; Dedhar, Shoukat; Shi, Xianglin; Jiang, Bing-Hua

CORPORATE SOURCE: Pathology and Physiology Research Branch, Health Effects Laboratory Division, National Institute for Occupational Safety and Health, Morgantown, WV, 26506, USA

SOURCE: Oncogene (2005), 24(19), 3154-3165

CODEN: ONCNES; ISSN: 0950-9232

PUBLISHER: Nature Publishing Group

DOCUMENT TYPE: Journal

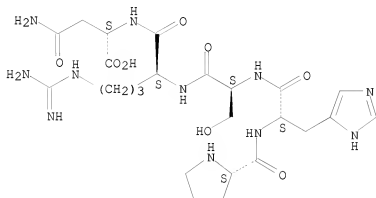
LANGUAGE: English

AB One of the hallmarks of integrin signaling is an increase in cell migration and invasion, both of which are associated with actin filament rearrangements. Integrin-linked kinase (ILK) is a cytoplasmic effector of integrin receptors. ILK is known to be involved in multiple cellular functions. However, the signaling pathways involved in ILK-mediated cellular structure and motility remain to be elucidated. Here, we have demonstrated that overexpression of ILK was sufficient to induce actin filament rearrangements, to form cell motility structures, and to increase cell migration and invasion in a phosphatidylinositol 3-kinase (PI3K)-dependent manner. This corresponds with the activation of both Akt and p70 ribosomal protein S6 kinase (p70S6K1). Overexpression of dominant-neg. mutants of Akt inhibited ILK-dependent activation of p70S6K1, indicating that Akt is upstream of p70S6K1 in response to ILK signaling. Overexpression of ILK was sufficient to induce Rac1 activation, which was abolished by a PI3K inhibitor, indicating that Rac1 activity is involved in ILK signaling in a PI3K dependent manner. Inhibition of Akt, Rac1, or p70S6K1 inhibited the effects of ILK on actin filaments and cell migration, suggesting a regulatory role of the PI3K/Akt/p70S6K1/Rac1 signaling pathway in response to ILK signaling. We have shown that overexpression of a dominant-neg. ILK was sufficient to abolish fibronectin peptide (PHSRN)-induced rearrangements of actin filaments and cell migration and invasion. Taken together, our results identify a mechanism through which ILK can regulate both integrin-associated rearrangements of actin filaments and cell migration and invasion at the integrin receptor-proximal region.

IT 158622-13-0
 RL: BSU (Biological study, unclassified); BIOL (Biological study)
 (fibronectin peptide; ILK mediates actin filament rearrangements and
 cell migration and invasion through PI3K/Akt/Rac1 signaling)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 43 THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2005:303191 CAPLUS
 DOCUMENT NUMBER: 142:341966
 TITLE: Hydrogels used to deliver medicaments to the eye for the treatment of posterior segment diseases
 INVENTOR(S): Schultz, Clyde L.
 PATENT ASSIGNEE(S): USA
 SOURCE: U.S. Pat. Appl. Publ., 7 pp., Cont.-in-part of U.S. Ser. No. 821,718.
 CODEN: USXXCO
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050074497	A1	20050407	US 2004-971997	20041022
US 20050208102	A1	20050922	US 2004-821718	20040409
US 20050255144	A1	20051117	US 2005-102454	20050409
WO 2005110473	A2	20051124	WO 2005-US12185	20050409
WO 2005110473	A3	20061123		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM,

AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK,
 EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT,
 RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML,
 MR, NE, SN, TD, TG

EP 1755672 A2 20070228 EP 2005-778127 20050409
 R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,
 IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA,
 HR, LV, MK, YU

CN 1946352 A 20070411 CN 2005-80012215 20050409
 IN 2006CN03687 A 20070112 IN 2006-CN3687 20061006

PRIORITY APPLN. INFO.:
 US 2003-461354P P 20030409
 US 2004-821718 A2 20040409
 US 2004-971997 A2 20041022
 WO 2005-US12185 W 20050409

AB This invention provides a polymeric drug delivery system including a hydrogel containing one or more drugs for the treatment of a posterior segment disease. Exemplary drugs are anti-angiogenesis compds. for the treatment of macular degeneration. Allowing passive transference of this drug from a dilute solution into the hydrogel produces the delivery system. The hydrogel, when placed in contact with the eye, delivers the drug. The delivery of the drug is sustained over an extended period of time, which is of particular utility in the eye, which is periodically flushed with tears. This sustained delivery accelerates the treatment process while avoiding potential damaging effects of localized delivery of high concns. of compds., e.g., from eye drops.

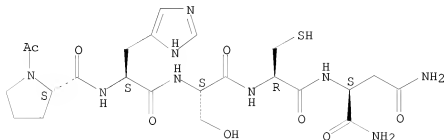
IT 262438-43-7, ATN-161
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (hydrogels containing drugs for treatment of eye diseases in posterior segment)

RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L4 ANSWER 42 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:857636 CAPLUS

DOCUMENT NUMBER: 141:348823

TITLE: Adhesion motif-bound multi-agretopes of N-terminal T cell epitope and C-terminal B cell epitope for transmembrane induction of antibody production

INVENTOR(S): Nishizawa, Toshiki

PATENT ASSIGNEE(S): Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo,

SOURCE: Japan
PCT Int. Appl., 71 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004087767	A1	20041014	WO 2004-JP4460	20040329
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004226032	A1	20041014	AU 2004-226032	20040329
CA 2521038	A1	20041014	CA 2004-2521038	20040329
EP 1614695	A1	20060111	EP 2004-724202	20040329
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK			
CN 1768079	A	20060503	CN 2004-80008931	20040329
KR 2006003865	A	20060111	KR 2005-717342	20050915
US 20070020257	A1	20070125	US 2005-551692	20050930
US 7384636	B2	20080610		

PRIORITY APPLN. INFO.: JP 2003-93243 A 20030331
WO 2004-JP4460 W 20040329
AB Avnxdded to provide polypeptide capable inducing the potentiation of antibody production when transmucosally administered without resort to any immune adjuvants, a composition containing the polypeptide and use thereof.

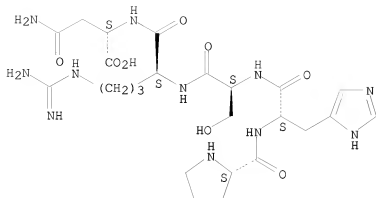
These objects can be achieved by establishing a polypeptide which is obtained by bonding the amino acid sequence of the adhesion motif of a cell adhesion mol. to a polypeptide comprising a peptide consisting of the amino acid sequence of a multi-agreptope type T cell epitope in its amino-terminal side and the amino acid sequence of a B cell epitope in its carboxyl-terminal side while having a linker peptide between these amino acid sequences, and providing a composition containing the polypeptide and use thereof.

IT 158622-13-0
RL: BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(adhesion motif-bound multi-agreptopes of N-terminal T cell epitope and C-terminal B cell epitope for transmucosal induction of antibody production)

RN 158622-13-0 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 43 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:610128 CAPLUS
 DOCUMENT NUMBER: 141:157478
 TITLE: Peptides which target tumor and endothelial cells, compositions and uses thereof
 INVENTOR(S): Allan, Amy L.; Yoon, Won Hyung; Gladstone, Patricia L.; Ternansky, Robert J.; Parry, Graham; Donate, Fernando; Mazar, Andrew
 PATENT ASSIGNEE(S): Attenuon, Llc, USA
 SOURCE: PCT Int. Appl., 117 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 2
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004063213	A2	20040729	WO 2003-US37895	20031125
WO 2004063213	A3	20050303		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2506813	A1	20040729	CA 2003-2506813	20031125
AU 2003298726	A1	20040810	AU 2003-298726	20031125
US 20040162239	A1	20040819	US 2003-723144	20031125
US 20050020810	A1	20050127	US 2003-722843	20031125
EP 1569678	A2	20050907	EP 2003-796483	20031125
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
BR 2003016550	A	20051004	BR 2003-16550	20031125
CN 1741808	A	20060301	CN 2003-80109204	20031125
CN 1741809	A	20060301	CN 2003-80109205	20031125
JP 2006515866	T	20060608	JP 2005-512876	20031125
NZ 540363	A	20071130	NZ 2003-540363	20031125

MX 2005PA05545	A	20051018	MX 2005-PA5545	20050525
NO 2005003112	A	20050805	NO 2005-3112	20050624
IN 2005KN01228	A	20070126	IN 2005-KN1228	20050624
PRIORITY APPLN. INFO.:			US 2002-429174P	P 20021125
			US 2003-475539P	P 20030602
			WO 2003-US37895	W 20031125

OTHER SOURCE(S): MARPAT 141:157478

AB The invention relates generally to peptide analogs of Ac-PHSCN-NH₂ which target tumor and endothelial cells and have antitumor, antiangiogenic and antimetastatic activity and to methods for their synthesis and use in pharmaceutical compns. for treating, preventing and detecting diseases characterized by tumor growth, metastasis and angiogenesis. The peptide analogs may serve, inter alia, as carriers of radioactivity, PET-active compds., toxins, fluorescent mols. and PEG mols. Peptides R1[(NHCHR2CO)0-1(X1)0-100]m-X2-X3-X4-X5-X6-[(X7)0-1(NHCHR3CO)0-1]nNR4R5 [R1 is (un)substituted acyl, alkyl, cycloalkyl or imino, or acyl chelate; R2 is substituted alkyl; R4, R5 are (un)substituted alkyl; X1, X7 are NH(CH:CH)1-6CO, NH(CH2)1-6CO, NHCHMeCO; X2-X6 are α-amino acids which are defined; m, n are 0 or 1, with the proviso that R1 is not acetyl when R4 and R5 are H and m and n are 0] are claimed. Thus, Ac-Pro-His-Ser-Cys(Ac)-Asn-OH was prepared by the solid-phase method and coupled to doxorubicin hydrochloride to afford the conjugate.

IT 262438-43-7DP, analogs 729594-61-0P 729594-62-1P

729594-71-2P 729594-72-3P 729594-82-5P

729594-85-8P 731003-01-3DP, Indium complexes

731003-01-3P

RL: DGN (Diagnostic use); PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of peptides which target tumor and endothelial cells)

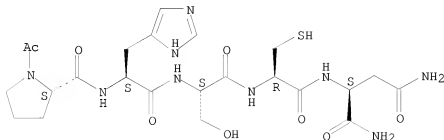
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



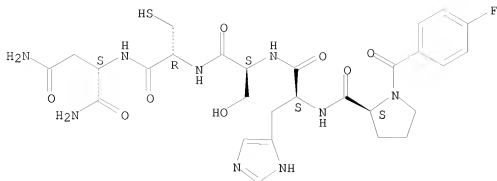
RN 729594-61-0 CAPLUS

CN L-Aspartamide, 1-(4-fluorobenzoyl)-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



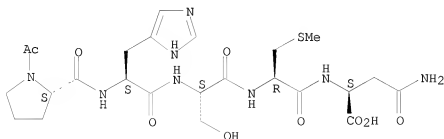
RN 729594-62-1 CAPLUS

12-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-methyl-L-cysteinyl-
(9CI) (CA INDEX NAME)

NTE modified

SEO 1 PHSCN

Absolute stereochemistry.



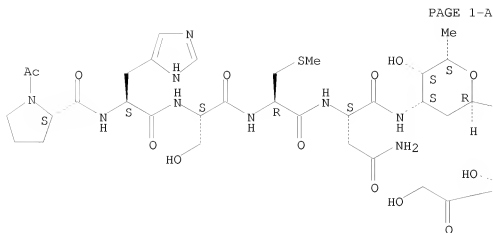
RN 729594-71-2 CAPLUS

CN 5,12-Naphthacenedione, 10-[[3-[(1-acetyl-L-prolyl-L-histidyl-L-seryl-L-methyl-L-cysteinyl-L-asparaginyl)amino]-2,3,6-trideoxy- α -L-lyxohexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)-(9CI) (CA INDEX NAME)

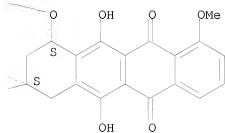
NTE modified

SEO 1 PHSCN

Absolute stereochemistry.



PAGE 1-B

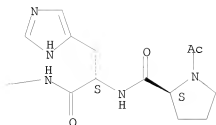
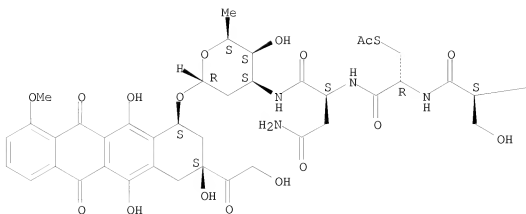


RN 729594-72-3 CAPLUS
 CN 5,12-Naphthacenedione, 10-[[3-[(1-acetyl-L-prolyl-L-histidyl-L-seryl-S-acetyl-L-cysteinyl-L-asparaginyl)amino]-2,3,6-trideoxy- α -L-lyxo-hexopyranosyl]oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-8-(hydroxyacetyl)-1-methoxy-, (8S,10S)- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



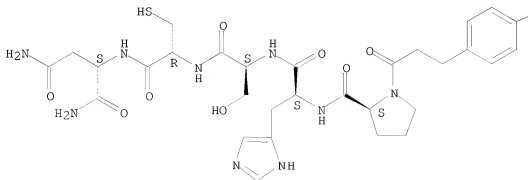
RN 729594-82-5 CAPLUS

CN L-Aspartamide, 1-[3-(4-hydroxyphenyl)-1-oxopropyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



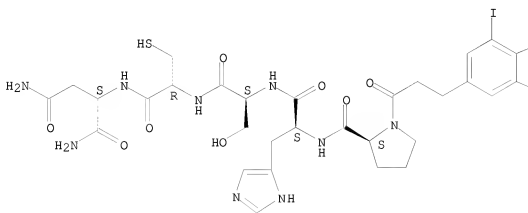
OH

RN 729594-85-8 CAPLUS
 CN L-Aspartamide, 1-[3-(4-hydroxy-3,5-diiodophenyl)-1-oxopropyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



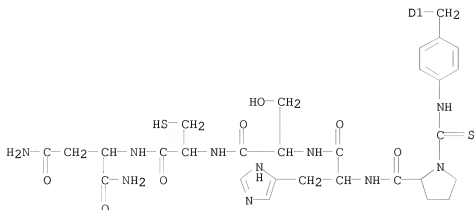
OH

I

RN 731003-01-3 CAPLUS
 CN L-Aspartamide, 1-[[[(4-methylphenyl)amino]thioxomethyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono[N,N-bis[2-bis(carboxymethyl)amino]ethylglycine] deriv. (9CI) (CA INDEX NAME)

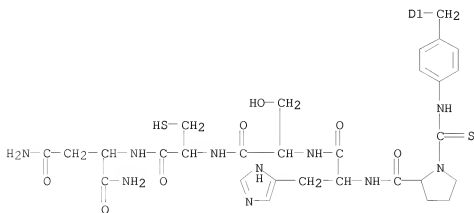
NTE modified (modifications unspecified)

SEQ 1 PHSCN



CN L-Aspartamide, 1-[[(4-methylphenyl)amino]thioxomethyl]-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, mono[N,N-bis[2-bis(carboxymethyl)amino]ethyl]glycine] deriv. (9CI) (CA INDEX NAME)

SEQ 1 PHSCN



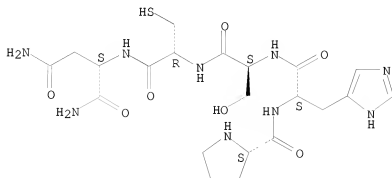
RN 729595-16-8 CAPLUS

CN L-Aspartamide, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



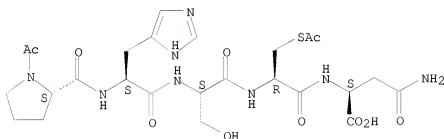
RN 729595-17-9 CAPLUS

CN L-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-acetyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L4 ANSWER 44 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:589427 CAPLUS

DOCUMENT NUMBER: 141:128866

TITLE: Ophthalmic compositions containing fibronectin peptide for the treatment of corneal injury

INVENTOR(S): Nishida, Teruo; Uetake, Yorihiisa; Iwata, Hiroaki

PATENT ASSIGNEE(S): Nihon Tenganyaku Kenkyusho Co., Ltd., Japan

SOURCE: PCT Int. Appl., 27 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004060385	A1	20040722	WO 2003-JP16514	20031224
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MM, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2004210692	A	20040729	JP 2002-381131	20021227
AU 2003296060	A1	20040729	AU 2003-296060	20031224
EP 1586324	A1	20051019	EP 2003-786242	20031224
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 20060234945	A1	20061019	US 2006-540446	20060508
PRIORITY APPLN. INFO.:			JP 2002-381131	A 20021227
			WO 2003-JP16514	W 20031224

AB It is intended to find out the min. activity expression site of fibronectin, clarify the function of the min. unit in the ophthalmic field and provide an ophthalmic therapeutic composition containing the same as the active ingredient. Namely, an ophthalmic therapeutic composition, in particular, a remedy for corneal injury, contains as the active ingredient a peptide PHSRN (Pro-His-Ser-Arg-Asn), its derivative Ac-Pro-His-Ser-Arg-Asn-NH₂ or a pharmaceutically acceptable salt thereof. A preferred dosage form of the composition is an ophthalmic solution

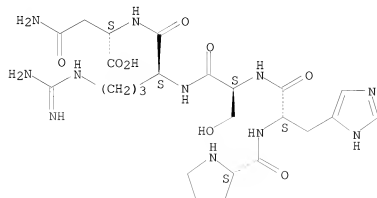
IT 158622-13-0 723297-44-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (ophthalmic comps. containing fibronectin peptide for treatment of corneal injury)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



RN 723297-44-7 CAPLUS

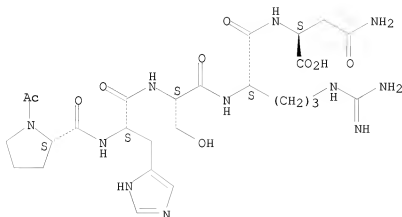
CN L-Asparagine, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-arginyl- (9CI) (CA

INDEX NAME)

NTE modified

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 45 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:467702 CAPLUS

DOCUMENT NUMBER: 141:33798

TITLE: Peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, their preparation, and compositions and therapeutic uses thereof

INVENTOR(S): Allan, Amy L.; Donate, Fernando; Hopkins, Stephanie A.; Gladstone, Patricia L.; Mazar, Andrew; O'Hare, Sean M.; Parry, Graham; Plunkett, Marian L.; Ternansky, Robert J.; Yoon, Won Hyung

PATENT ASSIGNEE(S): Attenuon, LLC, USA

SOURCE: PCT Int. Appl., 88 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004047771	A2	20040610	WO 2003-US38175	20031125
WO 2004047771	A3	20050915		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2507045	A1	20040610	CA 2003-2507045	20031125
AU 2003297609	A1	20040618	AU 2003-297609	20031125

US 20040162239	A1	20040819	US 2003-723144	20031125
US 20050020810	A1	20050127	US 2003-722843	20031125
BR 2003016523	A	20051018	BR 2003-16523	20031125
EP 1594521	A2	20051116	EP 2003-812058	20031125
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
CN 1741808	A	20060301	CN 2003-80109204	20031125
CN 1741809	A	20060301	CN 2003-80109205	20031125
JP 2006514116	T	20060427	JP 2005-510345	20031125
MX 2005PA05469	A	20050908	MX 2005-PA5469	20050523
NO 2005003111	A	20050824	NO 2005-3111	20050624
IN 2005KN01227	A	20060630	IN 2005-KN1227	20050624
PRIORITY APPLN. INFO.:			US 2002-429174P	P 20021125
			US 2003-475539P	P 20030602
			WO 2003-US38175	W 20031125

OTHER SOURCE(S): MARPAT 141:33798

AB The invention discloses peptides which inhibit angiogenesis, cell migration, cell invasion and cell proliferation, as well as methods of making the peptides, pharmaceutical compns. containing the peptides, and methods of using the peptides and pharmaceutical compns. to treat diseases associated with aberrant vascularization, e.g. cancer.

IT 701200-82-0P 701201-01-6P

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(peptide inhibitors of angiogenesis, cell migration, cell invasion and cell proliferation, preparation, and compns. and therapeutic uses)

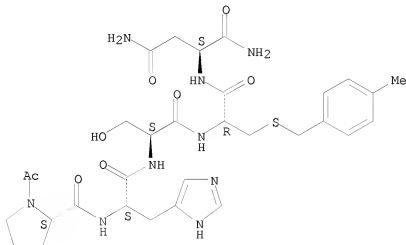
RN 701200-82-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methylphenyl)methyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



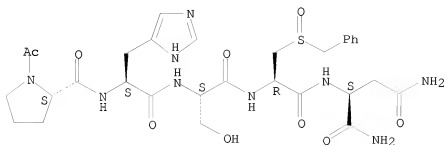
RN 701201-01-6 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-[(phenylmethyl)sulfinyl]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 701200-81-9P 701200-83-1P 701200-84-2P
701200-88-6P 701200-90-0P 701200-91-1P
701200-92-2P 701200-93-3P 701200-99-9P
701201-00-5P 701201-02-7P 701201-03-8P
701201-04-9P 701201-05-0P 701201-06-1P
701201-07-2P 701201-08-3P 701201-09-4P
701201-10-7P 701201-11-8P 701201-12-9P
701201-13-0P 701201-14-1P 701201-15-2P
701201-16-3P 701201-17-4P 701201-18-5P
701201-19-6P 701201-20-9P 701201-21-0P
701201-24-3P 701201-25-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES
(Uses)
(peptide inhibitors of angiogenesis, cell migration, cell invasion and
cell proliferation, preparation, and compns. and therapeutic uses)

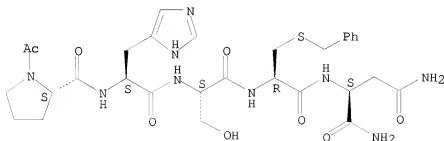
RN 701200-81-9 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(phenylmethyl)-L-
cysteiny- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



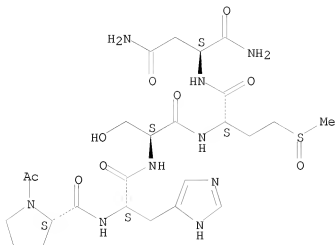
RN 701200-83-1 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-(2S)-2-amino-4-
(methylsulfinyl)butanoyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSMN

Absolute stereochemistry.



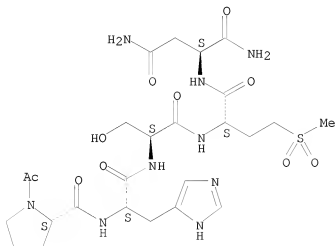
RN 701200-84-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-(2S)-2-amino-4-(methylsulfonyl)butanoyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSMN

Absolute stereochemistry.



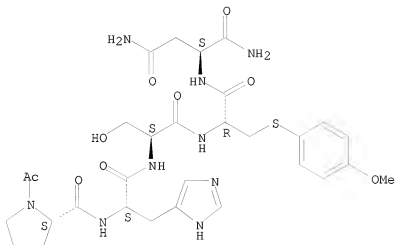
RN 701200-88-6 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(4-methoxyphenyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



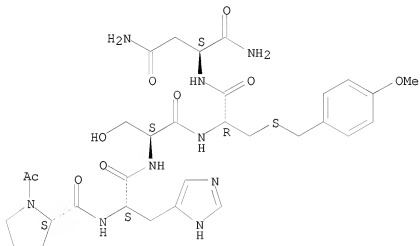
RN 701200-90-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(4-methoxyphenyl)methyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



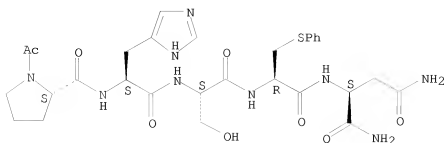
RN 701200-91-1 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-phenyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



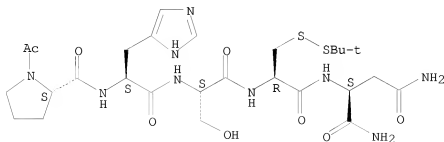
RN 701200-92-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-[(1,1-dimethylethyl)dithio]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



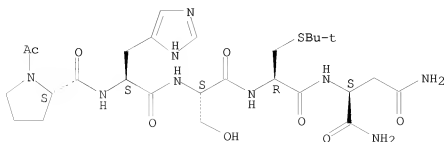
RN 701200-93-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(1,1-dimethylethyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



RN 701200-99-9 CAPLUS

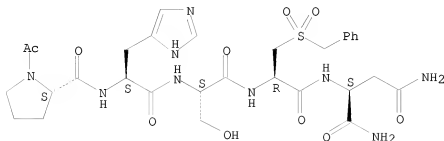
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-

[(phenylmethyl)sulfonyl]-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



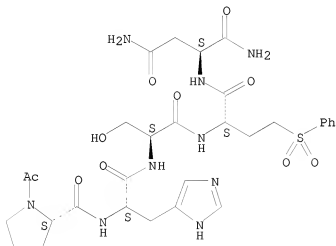
RN 701201-00-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-(2S)-2-amino-4-(phenylsulfonyl)butanoyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



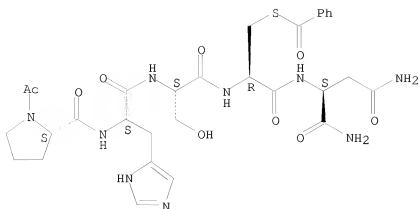
RN 701201-02-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-benzoyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



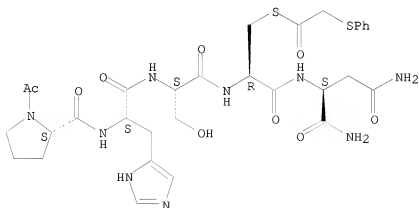
RN 701201-03-8 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(phenylthio)acetyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



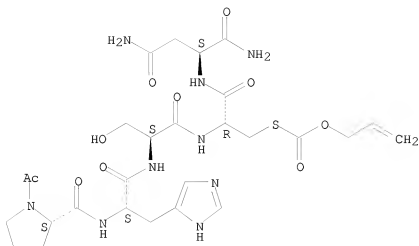
RN 701201-04-9 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-[(2-propenyloxy)carbonyl]-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



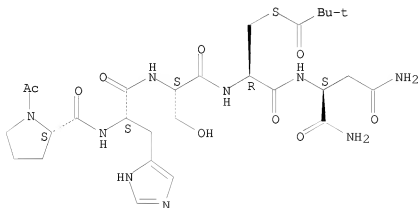
RN 701201-05-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2,2-dimethyl-1-oxopropyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



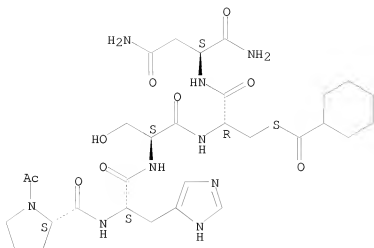
RN 701201-06-1 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(cyclohexylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



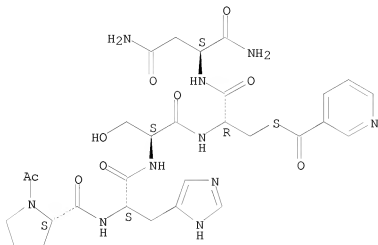
RN 701201-07-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(3-pyridinylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



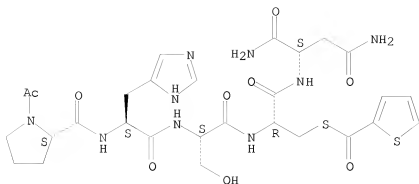
RN 701201-08-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-thienylcarbonyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



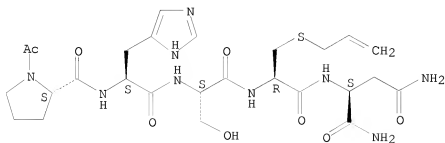
RN 701201-09-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-2-propenyl-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



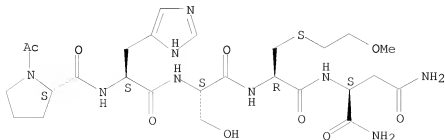
RN 701201-10-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-methoxyethyl)-L-cysteinyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

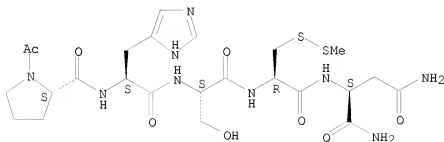


RN 701201-11-8 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-(methyldithio)-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.

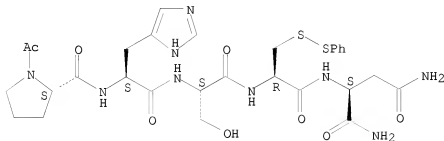


RN 701201-12-9 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-(phenyldithio)-L-alanyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



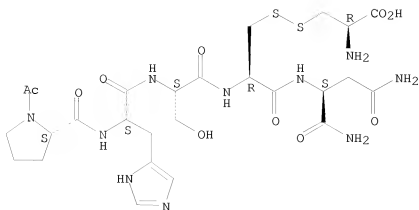
RN 701201-13-0 CAPLUS
CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl-, disulfide with L-cysteine (9CI) (CA INDEX NAME)

NTE multichain
modified

SEQ 1 PHSCN

1 C

Absolute stereochemistry.



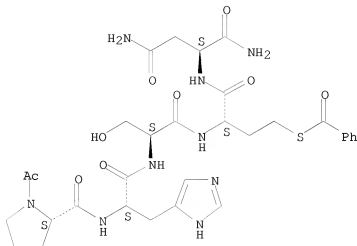
RN 701201-14-1 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-benzoyl-L-homocysteinyloxy- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



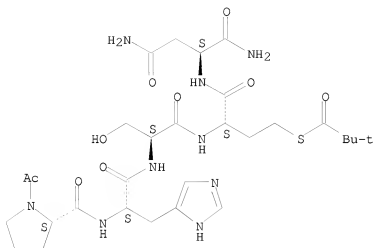
RN 701201-15-2 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2,2-dimethyl-1-oxopropyl)-L-homocysteinyloxy- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



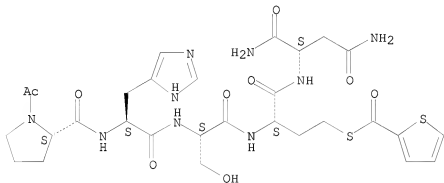
RN 701201-16-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-thienylcarbonyl)-
L-homocysteinyll- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



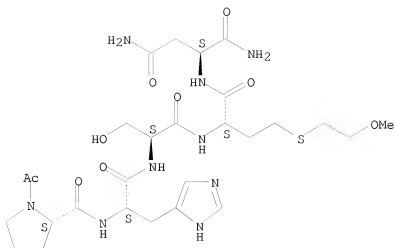
RN 701201-17-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(2-methoxyethyl)-L-
homocysteinyll- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



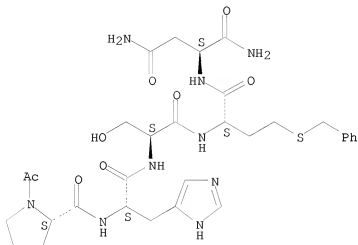
RN 701201-18-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-(phenylmethyl)-L-homocysteiny- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSMN

Absolute stereochemistry.



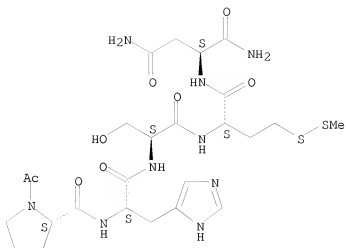
RN 701201-19-6 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-(2S)-2-amino-4-(methylidithio)butanoyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



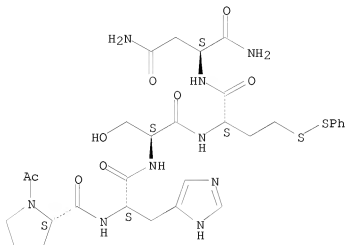
RN 701201-20-9 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-(2S)-2-amino-4-(phenyldithio)butanoyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



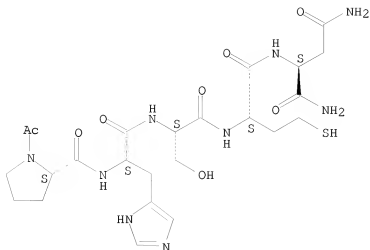
RN 701201-21-0 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-homocysteinyll- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



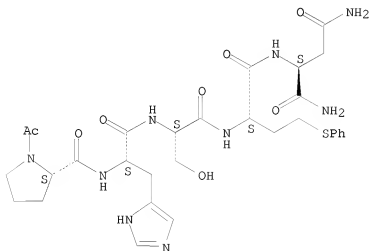
RN 701201-24-3 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-S-phenyl-L-homocysteinylnyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

Absolute stereochemistry.



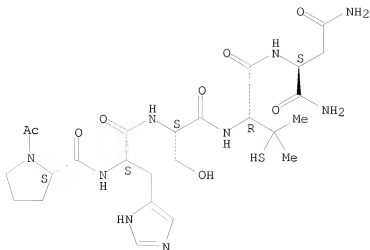
RN 701201-25-4 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-3-mercapto-L-valyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSXN

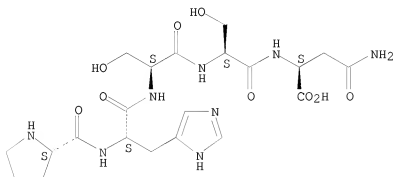
Absolute stereochemistry.



IT 701201-28-7
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL
 (Biological study); USES (Uses)
 (peptide inhibitors of angiogenesis, cell migration, cell invasion and
 cell proliferation, preparation, and compns. and therapeutic uses)
 RN 701201-28-7 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-seryl- (9CI) (CA INDEX NAME)

SEQ 1 PHSSN

Absolute stereochemistry.

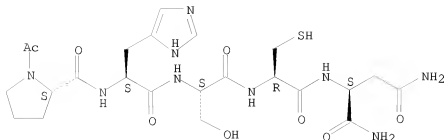


IT 262438-43-7
 RL: RCT (Reactant); RACT (Reactant or reagent)
 (peptide inhibitors of angiogenesis, cell migration, cell invasion and
 cell proliferation, preparation, and compns. and therapeutic uses)
 RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
 INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



L4 ANSWER 46 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:414706 CAPLUS

DOCUMENT NUMBER: 140:420373

TITLE: Substrates, devices, and methods for cellular assays

INVENTOR(S): Murphy, Christopher; Israel, Barbara; Abbott, Nicholas

PATENT ASSIGNEE(S): Platypus Technologies, Llc, USA

SOURCE: PCT Int. Appl., 206 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

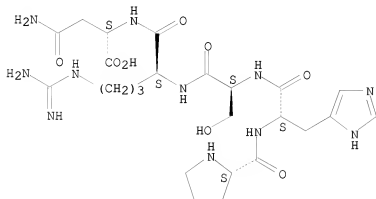
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004041061	A2	20040521	WO 2003-US16158	20030522
WO 2004041061	A3	20050506		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2486812	A1	20040521	CA 2003-2486812	20030522
AU 2003299522	A1	20040607	AU 2003-299522	20030522
AU 2003299522	B2	20080306		
EP 1549953	A2	20050706	EP 2003-799809	20030522
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
US 20050221271	A1	20051006	US 2003-443419	20030522
US 7018838	B2	20060328		
JP 2006501860	T	20060119	JP 2004-549903	20030522
US 20060141446	A1	20060629	US 2006-342413	20060130
AU 2008020499	A1	20080626	AU 2008-202499	20080605
PRIORITY APPLN. INFO.:			US 2002-382446P	P 20020522
			US 2003-443419	A 20030522
			AU 2003-299522	A3 20030522
			WO 2003-US16158	W 20030522

AB The present invention relates to the field of mol. diagnostics, and in particular to diagnostics based on a liquid crystal assay format. In particular, the present invention provided improved substrates and methods of using liquid crystal assays for quantitating the amount of an analyte in a sample. The present invention also provides materials and methods for detecting non-specific binding of an analyte to a substrate by using a

liquid crystal assay format.
 IT 158622-13-0
 RL: ANT (Analyte); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study)
 (substrates, devices, and methods for cellular assays)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 47 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2004:202582 CAPLUS
 DOCUMENT NUMBER: 140:395470
 TITLE: Biomimetic peptide-amphiphiles for functional biomaterials: the role of GRGDSP and PHSRN
 AUTHOR(S): Mardilovich, Anastasia; Kokkoli, Efrosini
 CORPORATE SOURCE: Department of Chemical Engineering, University of Massachusetts, Amherst, MA, 01003, USA
 SOURCE: Biomacromolecules (2004), 5(3), 950-957
 CODEN: BOMAF6; ISSN: 1525-7797
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB The study involved the use of a biomimetic system that allows us to study specific interactions in the $\alpha 5 \beta 1$ receptor-GRGDSP ligand system with an atomic force microscope (AFM). Bioartificial membranes that mimic the adhesion domain of the extracellular matrix protein fibronectin are constructed from peptide-amphiphiles. A novel peptide-amphiphile is designed that contains both GRGDSP (Gly-Arg-Gly-Asp-Ser-Pro, the primary recognition site for $\alpha 5 \beta 1$) and PHSRN (Pro-His-Ser-Arg-Asn, the synergy binding site for $\alpha 5 \beta 1$) sequences in a single peptide formulation, separated by a spacer. Two different antibodies are used to immobilize and activate isolated $\alpha 5 \beta 1$ integrins on the AFM tip. The interaction measured between immobilized $\alpha 5 \beta 1$ integrins and peptide-amphiphiles is specific for integrin-peptide binding and is affected by divalent cations in a way that accurately mimics the adhesion function of the $\alpha 5 \beta 1$ receptor. The strength of the PHSRN synergistic effect depends on the accessibility of this sequence to $\alpha 5 \beta 1$ integrins. An increase in adhesion is observed compared to surfaces displaying only GRGDSP peptides when the new biomimetic peptide-amphiphiles are diluted with lipidated poly(ethylene glycol), which

provides more space for the peptide headgroups to bend and expose more of the PHSRN at the interface.

IT 552314-28-0

RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(role of GRGDSP and PHSRN in the biomimetic peptide-amphiphiles for functional biomembranes)

RN 552314-28-0 CAPLUS

CN L-Asparagine, 1-[4-[[(1S)-4-(hexadecyloxy)-1-[(hexadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl-
(CA INDEX NAME)

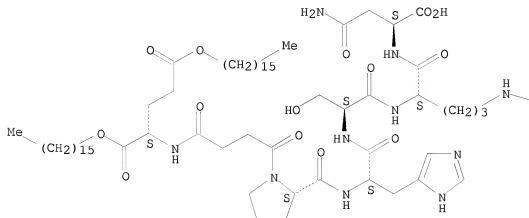
NTE multichain
modified (modifications unspecified)

SEQ 1 PHSRN

1 E

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



REFERENCE COUNT: 61 THERE ARE 61 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 48 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2004:125125 CAPLUS

DOCUMENT NUMBER: 140:344837
 TITLE: Collective and single-molecule interactions of $\alpha 5\beta 1$ integrins
 AUTHOR(S): Kokkoli, Efrosini; Ochsenhirt, Sarah E.; Tirrell, Matthew
 CORPORATE SOURCE: Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, 55455, USA
 SOURCE: Langmuir (2004), 20(6), 2397-2404
 CODEN: LANGD5; ISSN: 0743-7463
 PUBLISHER: American Chemical Society
 DOCUMENT TYPE: Journal
 LANGUAGE: English

AB A novel biomimetic system was used to study collective and single-mol. interactions of the $\alpha 5\beta 1$ receptor-GRGDSP ligand system with an atomic force microscope (AFM). Bioartificial membranes, which display peptides that mimic the cell adhesion domain of the extracellular matrix protein fibronectin, are constructed from peptide-amphiphiles. The interaction measured with the immobilized $\alpha 5\beta 1$ integrins and GRGDSP peptide-amphiphiles is specifically related to the integrin-peptide binding. It is affected by divalent cations in a way that accurately mimics the adhesion function of the $\alpha 5\beta 1$ receptor. The recognition of the immobilized receptor was significantly increased for a surface that presented both the primary recognition site (GRGDSP) and the synergy site (PHSRN) compared to the adhesion measured with surfaces that displayed only the GRGDSP peptide. At the collective level, the separation process of the receptor-ligand pairs is a combination of multiple unbinding and stretching events that can accurately be described by the wormlike chain (WLC) model of polymer elasticity. In contrast, stretching was not observed at the single-mol. level. The dissociation of single $\alpha 5\beta 1$ -GRGDSP pairs under loading rates of 1-305 nN/s revealed the presence of two activation energy barriers in the unbinding process. The high-strength regime above 59 nN/s maps the inner barrier at a distance of 0.09 nm along the direction of the force. Below 59 nN/s a low-strength regime appears with an outer barrier at 2.77 nm and a much slower transition rate that defines the dissociation rate (off-rate) in the absence of force ($k_{off}^0 = 0.015$ s⁻¹).

IT 552314-28-0
 RL: PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (collective and single-mol. interactions of $\alpha 5\beta 1$ integrins)

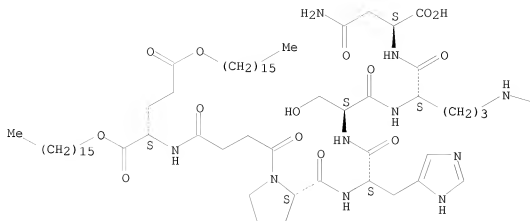
RN 552314-28-0 CAPLUS

CN L-Asparagine, 1-[4-[[[(1S)-4-(hexadecyloxy)-1-[(hexadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl-(CA INDEX NAME)

NTE multichain
 modified (modifications unspecified)

SEQ 1 PHSRN
 1 E

Absolute stereochemistry.



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 49 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:243058 CAPLUS

DOCUMENT NUMBER: 139:17332

TITLE: Inhibition of integrin $\alpha 5 \beta 1$ function with a small peptide (ATN-161) plus continuous 5-FU infusion reduces colorectal liver metastases and improves survival in mice

AUTHOR(S): Stoeltzing, Oliver; Liu, Wenbiao; Reinmuth, Niels; Fan, Fan; Parry, Graham C.; Parikh, Alexander A.; McCarty, Marya F.; Bucana, Corazon D.; Mazar, Andrew P.; Ellis, Lee M.

CORPORATE SOURCE: Department of Cancer Biology, The University of Texas M.D. Anderson Cancer Center, Houston, TX, 77030-4009, USA

SOURCE: International Journal of Cancer (2003), 104(4), 496-503

CODEN: IJCNW; ISSN: 0020-7136

PUBLISHER: Wiley-Liss, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Integrin $\alpha 5 \beta 1$ is expressed on activated endothelial cells and plays a critical role in tumor angiogenesis. We hypothesized that a novel

integrin $\alpha 5 \beta 1$ antagonist, ATN-161, would inhibit angiogenesis and growth of liver metastases in a murine model. We further hypothesized that combining ATN-161 with 5-fluorouracil (5-FU) chemotherapy would enhance the antineoplastic effect. Murine colon cancer cells (CT26) were injected into spleens of BALB/c mice to produce liver metastases. Four days thereafter, mice were given either ATN-161 (100 mg/kg, every 3rd day) or saline by i.p. injection, with or without combination of continuous-infusion 5-FU (100 mg/kg/2 wk), which was started on day 7. On day 20 after tumor cell inoculation, mice were killed and liver wts. and number of liver metastases were determined. A follow-up study on survival was

also

conducted in which mice were randomized to receive ATN-161, 5-FU or ATN-161+5-FU. Combination therapy with ATN-161+5-FU significantly reduced tumor burden (liver weight) and number of liver metastases ($p < 0.02$). Liver tumors in the ATN-161 and ATN-161+5-FU groups had significantly fewer microvessels ($p < 0.05$) than tumors in the control or 5-FU-treated groups. Unlike treatment with either agent alone, ATN-161+5-FU significantly increased tumor cell apoptosis and decreased tumor cell proliferation ($p < 0.03$) and improved overall survival ($p < 0.03$, log-rank test). Targeting integrin $\alpha 5 \beta 1$ in combination with 5-FU infusion reduced liver metastases formation and improved survival in this colon cancer model. The enhancement of antineoplastic activity from the combination of anti-angiogenic therapy and chemotherapy may be a promising approach for treating metastatic colorectal cancer.

IT

262438-43-7, ATN 161

RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(inhibition of integrin $\alpha 5 \beta 1$ function with ATN-161 plus 5-FU infusion reduces colorectal liver metastases and improves survival in mice)

RN

262438-43-7 CAPLUS

CN

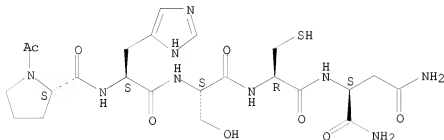
L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ

1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT:

42

THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 50 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2003:222672 CAPLUS

DOCUMENT NUMBER: 139:65020

TITLE: Single-molecule force spectroscopy of $\alpha 5 \beta 1$ integrins

AUTHOR(S): Mardilovich, Anastasia; Kokkoli, Efrosini

CORPORATE SOURCE: Department of Chemical Engineering, University of
Massachusetts, Amherst, MA, 01003, USA

SOURCE: PMSE Preprints (2003), 88, 274-275
CODEN: PPMRA9; ISSN: 1550-6703

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal; (computer optical disk)

LANGUAGE: English

AB In this work, bioartificial membranes that mimic the cell adhesion domain
of the extracellular matrix protein, fibronectin, are constructed from
mixts. of biopolymers such as peptide-amphiphiles and polyethylene glycol
(PEG) amphiphilic mols. In conclusion, our results demonstrate that our
biomimetic system can give an insight into the dynamic character of
 $\alpha 5\beta 1$ -GRGDSP interaction and allow us to understand how
different environmental conditions and multiple peptides can enhance the
performance of functionalized interfaces.

IT 552314-28-0
RL: BSU (Biological study, unclassified); PRP (Properties); BIOL
(Biological study)
(single-mol. force spectroscopy of $\alpha 5\beta 1$ integrins)

RN 552314-28-0 CAPLUS

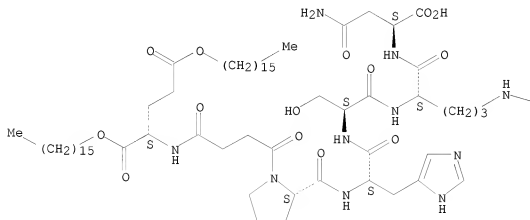
CN L-Asparagine, 1-[4-[[(1S)-4-(hexadecyloxy)-1-[(hexadecyloxy)carbonyl]-4-oxobutyl]amino]-1,4-dioxobutyl]-L-prolyl-L-histidyl-L-seryl-L-arginyl-
(CA INDEX NAME)

NTE multichain
modified (modifications unspecified)

SEQ 1 PHSRN
1 E

Absolute stereochemistry.

PAGE 1-A





REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 51 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2002:946155 CAPLUS
 DOCUMENT NUMBER: 138:29190
 TITLE: Bioactive surface modifiers for polymers for medical goods
 INVENTOR(S): Santerre, Paul J.
 PATENT ASSIGNEE(S): Can.
 SOURCE: PCT Int. Appl., 64 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002098477	A2	20021212	WO 2002-CA817	20020603
WO 2002098477	A3	20040205		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, IG			
CA 2349989	A1	20021207	CA 2001-2349989	20010607
CA 2462529	A1	20021212	CA 2002-2462529	20020603
AU 2002304926	A1	20021216	AU 2002-304926	20020603
AU 2002304926	B2	20071004		
NZ 529795	A	20031219	NZ 2002-529795	20020603
EP 1418946	A2	20040519	EP 2002-732278	20020603
EP 1418946	B1	20070919		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
AT 373491	T	20071015	AT 2002-732278	20020603
ES 2294134	T3	20080401	ES 2002-732278	20020603
US 20030097120	A1	20030522	US 2002-162084	20020605
US 6770725	B2	20040803		
PRIORITY APPLN. INFO.:			CA 2001-2349989	A 20010607
			WO 2002-CA817	W 20020603

AB This invention relates to macromol. modifiers containing biol. active drugs/biomols., or precursors thereof, and fluoroligomers; compns.

comprising the macromols. containing the drugs and fluoroligomers in admixt. with polymers, particularly biomedical polymers; articles made from the admixts., particularly medical devices. Thus, a polymer was obtained from lysine diisocyanate, polycarbonate diol, a fluoro oligomer and vitamin.

IT 158622-13-0

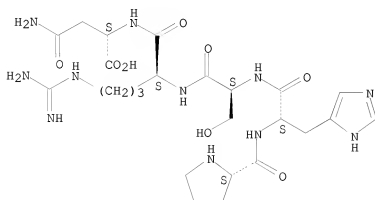
RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(nucleotides and peptides; bioactive surface modifiers for polymers for medical goods)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 52 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:723425 CAPLUS

DOCUMENT NUMBER: 138:122851

TITLE: Preparation and biological activities of a bivalent poly(ethylene glycol) hybrid containing an active site and its synergistic site of fibronectin

AUTHOR(S): Susuki, Yuichi; Hojo, Keiko; Okazaki, Ikuko; Kamata, Haruhiko; Sasaki, Masahiko; Maeda, Mitsuko; Nomizu, Motoyoshi; Yamamoto, Yoko; Nakagawa, Shinsaku; Mayumi, Tadanori; Kawasaki, Koichi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences and High Technology Research Center, Kobe Gakuin University, Kobe, 651-2180, Japan

SOURCE: Chemical & Pharmaceutical Bulletin (2002), 50(9), 1229-1232

CODEN: CPBTAL; ISSN: 0009-2363

PUBLISHER: Pharmaceutical Society of Japan

DOCUMENT TYPE: Journal

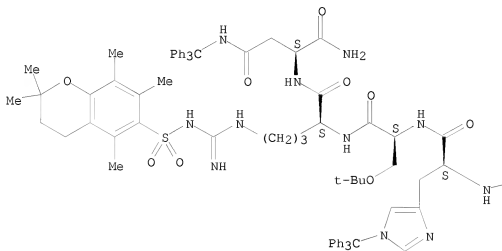
LANGUAGE: English

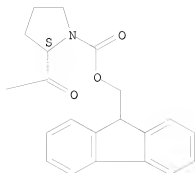
AB A bivalent poly(ethylene glycol) or PEG hybrid of fibronectin-related peptides was prepared. An active site peptide (RGD) and its synergistic site peptide (PHSRN) of fibronectin were conjugated with an amino acid-type PEG (aaPEG) to form PHSRN-aaPEG-RGD. A moderate spatial array between RGD and PHSRN in fibronectin may be required for synergic activity. The bivalent hybrid exhibited potent cell spreading activity and exhibited potent anti-metastatic activity in a model of exptl. metastasis with B16-BL6 cells in mice. PEG may serve as a spacer for maintaining the desired

spatial array.
IT 490025-92-8D, resin-bound
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and biol. activity of PHSRN-aaPEG-RGD as fibronectin inhibitor
for prevention of metastasis of melanoma)
RN 490025-92-8 CAPLUS
CN L-Aspartamide, 1-[(9H-fluoren-9-ylmethoxy)carbonyl]-L-prolyl-1-
(triphenylmethyl)-L-histidyl-O-(1,1-dimethylethyl)-L-seryl-N5-[[[(3,4-
dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-
yl)sulfonyl]amino]iminomethyl]-L-ornithyl-N4-(triphenylmethyl)- (9CI) (CA
INDEX NAME)
NTE modified
SEQ 1 PHSRN

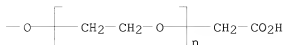
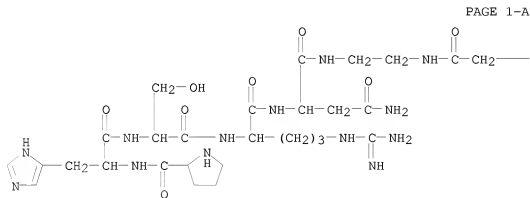
Absolute stereochemistry.

PAGE 1-A





IT 490025-94-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation and biol. activity of PHSRN-aaPEG-RGD as fibronectin inhibitor
 for prevention of metastasis of melanoma)
 RN 490025-94-0 CAPLUS
 CN Poly(oxy-1,2-ethanediyl), α -(carboxymethyl)- ω -hydroxy-,
 5-ether with L-prolyl-L-histidyl-L-seryl-L-arginyl-N1-[2-
 [(hydroxyacetyl)amino]ethyl]-L-aspartamide (9CI) (CA INDEX NAME)
 NTE modified (modifications unspecified)
 SEQ 1 PHSRN



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 53 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:692596 CAPLUS

DOCUMENT NUMBER: 138:90056

TITLE: Design and synthesis of the hydroxamic acid variants antitumorogenic and antimetastatic hydroxamate based Ac-PHSXX'-NH₂ sequences

AUTHOR(S): Sun, Yingchuan; Spatola, Arno F.

CORPORATE SOURCE: Department of Chemistry and the Institute for Molecular Diversity and Drug Design, University of Louisville, Louisville, KY, 40292, USA

SOURCE: Peptides: The Wave of the Future, Proceedings of the Second International and the Seventeenth American Peptide Symposium, San Diego, CA, United States, June 9-14, 2001 (2001), 799-800. Editor(s): Lebl, Michal; Houghten, Richard A. American Peptide Society: San Diego, Calif.

CODEN: 69DBAL; ISBN: 0-9715560-0-8

DOCUMENT TYPE: Conference

LANGUAGE: English

AB A symposium report. Peptides MeCO-Pro-His-Ser-Xaa-Yaa-NH₂ [Xaa = Asp(NH₂), Glu(NH₂); Yaa = Leu, Asn], containing a hydroxamate group for superior metal-binding ability, were synthesized as potential antitumor and antimetastatic agents (biol. activity data not reported).

IT 483369-70-6P 483369-71-7P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of peptidyl hydroxamic acids as potential antitumor and antimetastatic agents)

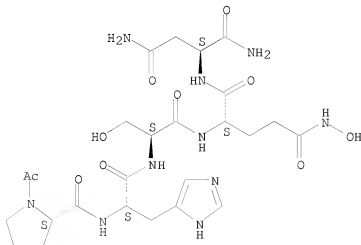
RN 483369-70-6 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-N-hydroxy-L-glutaminyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSQN

Absolute stereochemistry.



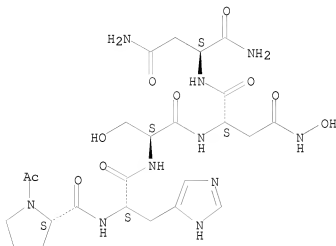
RN 483369-71-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-N-hydroxy-L-asparaginyl- (9CI) (CA INDEX NAME)

NTE modified

SEQ 1 PHSNN

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:652648 CAPLUS

DOCUMENT NUMBER: 138:343742

TITLE: Interactions of corneal epithelial cells and surfaces modified with cell adhesion peptide combinations
Aucoin, L.; Griffith, C. M.; Pleizier, G.; Deslandes, Y.; Sheardown, H.

CORPORATE SOURCE: Department of Chemical Engineering, McMaster University, Hamilton, ON, L8S 4L7, Can.

SOURCE: Journal of Biomaterials Science, Polymer Edition (2002), 13(4), 447-462
CODEN: JBSEER; ISSN: 0920-5063

PUBLISHER: VSP BV

DOCUMENT TYPE: Journal

LANGUAGE: English

AB In order to facilitate the adhesion of corneal epithelial cells to a poly di-Me siloxane (PDMS) substrate ultimately for the development of a synthetic keratoprosthesis, PDMS surfaces were modified by covalent attachment of combinations of cell adhesion and synergistic peptides derived from laminin and fibronectin. Peptides studied included YIGSR and its synergistic peptide PDSGR from laminin and the fibronectin derived RGDS and PHSRN. Surfaces were modified with combinations of peptides determined by an exptl. design. Peptide surface densities, measured using 125-I labeled tyrosine containing analogs, GYRGDS, GYPHSRN and GYPDSGR, were on the order of pmol/cm². Surface d. varied as a linear function of peptide concentration in the reaction solution, and was different for the different peptides examined. The lowest surface d. at all solution fractions was obtained with GYRGDS, while the highest d. was consistently obtained with GYPDSGR. These results provide evidence that the surfaces were modified with

multiple peptides. Water contact angles and XPS results provided addnl. evidence for differences in the chemical composition of the various surfaces. Significant differences in the adhesion of human corneal epithelial cells to the modified surfaces were noted. Statistical anal. of the exptl. adhesion results suggested that solution concentration YIGSR, RGDS, and PHSRN

as

well as the interaction effect of YIGSR and PDSGR had a significant effect on cell interactions. Modification with multiple peptides resulted in greater adhesion than modification with single peptides only. Surface modification with a control peptide PPSRN in place of PHSRN resulted in a decrease in cell adhesion in virtually all cases. These results suggest that surface modification with appropriate combinations of cell adhesion peptides and synergistic peptides may result in improved cell surface interactions.

IT

158622-13-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(interactions of corneal epithelial cells and surfaces modified with cell adhesion peptide combinations)

RN

158622-13-0 CAPLUS

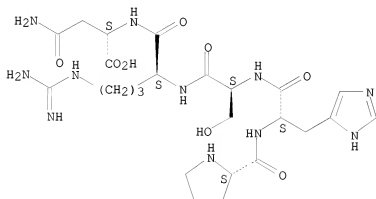
CN

L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ

1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT:

44

THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:631705 CAPLUS

DOCUMENT NUMBER: 138:297158

TITLE: Suppression of Tumor Recurrence and Metastasis by a Combination of the PHSCN Sequence and the Antiangiogenic Compound Tetrathiomolybdate in Prostate Carcinoma

AUTHOR(S): van Golen, Kenneth L.; Bao, Liwei; Brewer, George J.; Pienta, Kenneth J.; Kamradt, Jeffrey M.; Livant, Donna L.; Merajver, Sofia D.

CORPORATE SOURCE: Division of Hematology and Oncology, Department of Internal Medicine, University of Michigan Comprehensive Cancer Center, Ann Arbor, MI, 48109-0948, USA

SOURCE: Neoplasia (New York, NY, United States) (2002), 4(5), 373-379

CODEN: NEOPFL; ISSN: 1522-8002

PUBLISHER: Nature Publishing Group
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Plasma fibronectin-mediated invasion of human DU145 prostate cancer cell line was efficaciously inhibited in a rat tumor model by treatment with Ac-PHSCN-NH₂ peptide. Invasion of DU145 cells was stimulated by the PHSRN sequence of plasma fibronectin. However, PHSCN acts as a competitive inhibitor of PHSRN-mediated invasion. In the current study, we determined whether PHSCN could inhibit the recurrence and metastasis of DU145 tumors after excision of the primary tumor in an athymic nude mouse model. We demonstrated that mice treated thrice weekly with i.v. Ac-PHSCN-NH₂ peptide survived tumor-free for more than 30 wk post-primary tumor excision, whereas their untreated counterparts succumbed to recurrence and/or metastatic disease in significantly less time. Because of the universal requirement for angiogenesis in solid tumor growth, we tested the efficacy of copper deficiency induced by tetrathiomolybdate (TM) to retard tumor growth in the Dunning prostate cancer model. Significant reduction in size of the primary tumor was observed in mice rendered copper deficient. We sought to reduce tumor growth at the primary and metastatic sites by combining the anti-invasion Ac-PHSCN-NH₂ peptide with TM. Improved survival, fewer metastatic lesions, and excellent tolerability were observed with the combination therapy.

IT 262438-43-7
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(suppression of tumor recurrence and metastasis by a combination of PHSCN sequence and the antiangiogenic compound tetrathiomolybdate in prostate carcinoma)

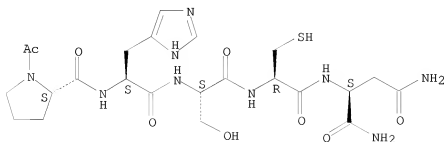
RN 262438-43-7 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 56 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:555761 CAPLUS

DOCUMENT NUMBER: 137:121939

TITLE: Compositions and methods for the use of fibronectin fragments in the diagnosis of cancer

INVENTOR(S): Livant, Donna

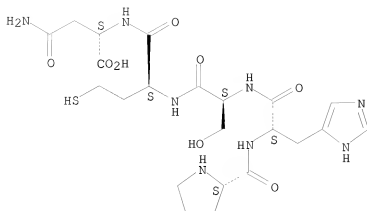
PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: PCT Int. Appl., 77 pp.
 DOCUMENT TYPE: CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: English
 PATENT INFORMATION: 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002057786	A2	20020725	WO 2002-US1189	20020115
WO 2002057786	A3	20031211		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2435320	A1	20020725	CA 2002-2435320	20020115
CA 2435320	C	20080603		
AU 2002245270	A1	20020730	AU 2002-245270	20020115
EP 1388013	A2	20040211	EP 2002-713418	20020115
EP 1388013	B1	20070711		
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR			
AT 366936	T	20070815	AT 2002-713418	20020115
PRIORITY APPLN. INFO.:			US 2001-765496	A 20010118
			WO 2002-US1189	W 20020115
OTHER SOURCE(S):	MARPAT 137:121939			
AB	The present invention concerns the detection tumors in vivo, the imaging of tumors in vivo, and the imaging of cancerous tissue in pathol. samples. In particular the present invention incorporates the use of fibronectin fragments into these same detection and imaging methods.			
IT	252230-05-0 262438-43-7 443305-20-2 443305-23-5 RL: ARG (Analytical reagent use); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); USES (Uses) (compos. and methods for use of fibronectin fragments in diagnosis of cancer)			
RN	252230-05-0 CAPLUS			
CN	L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-homocysteinyl- (9CI) (CA INDEX NAME)			

SEQ 1 PHSXN

Absolute stereochemistry.

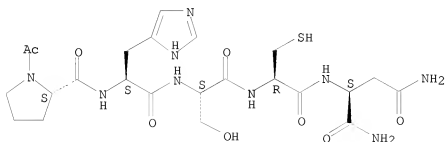


RN 262438-43-7 CAPLUS
 CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA
 INDEX NAME)

NTE modified

SEQ 1 PHSCN

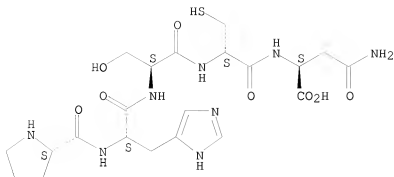
Absolute stereochemistry.



RN 443305-20-2 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI) (CA INDEX
 NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



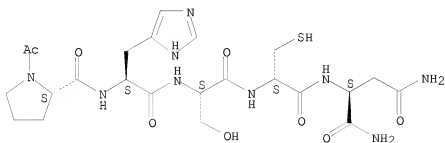
RN 443305-23-5 CAPLUS

CN L-Aspartamide, 1-acetyl-L-prolyl-L-histidyl-L-seryl-D-cysteinyl- (9CI)
(CA INDEX NAME)

NTE modified

SEQ 1 PHSCN

Absolute stereochemistry.



IT 252229-85-9P

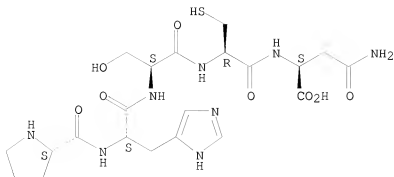
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(comps. and methods for use of fibronectin fragments in diagnosis of cancer)

RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



IT 158622-13-0 252229-34-8 252229-40-6

RL: PRP (Properties)

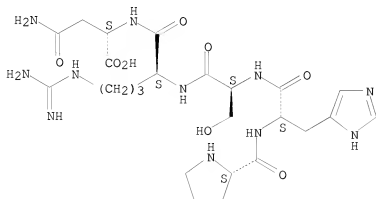
(unclaimed sequence; compns. and methods for the use of fibronectin fragments in the diagnosis of cancer)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.

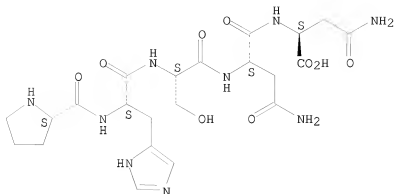


RN 252229-34-8 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

Absolute stereochemistry.

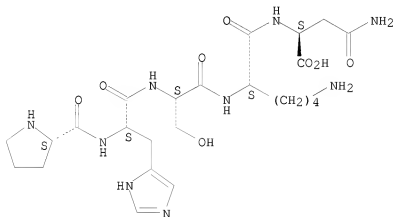


RN 252229-40-6 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.



L4 ANSWER 57 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2002:52006 CAPLUS

DOCUMENT NUMBER: 136:123717

TITLE: Synthetic device for cornea augmentation and replacement that increases corneal epithelium cell adhesion and migration

INVENTOR(S): Jacob, Jean T.; Bi, Jingjing

PATENT ASSIGNEE(S): Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, USA

SOURCE: U.S. Pat. Appl. Publ., 13 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----

US 20020007217 A1 20020117 US 2001-822582 20010330
US 6689165 B2 20040210

PRIORITY APPLN. INFO.: US 2000-193528P P 20000331

AB A synthetic device for cornea augmentation and replacement that increases corneal epithelium cell adhesion and migration is described. Using tethered extracellular matrix proteins (ECMPs), corneal growth factors, and other ligand-specific corneal enhancer species (e.g., laminin, fibronectin, substance P, fibronectin adhesion-promoting peptide sequence, FAP, and insulin-like growth factor-1 [IGF-1]) on the polymeric surface of an artificial cornea, the epithelial cell response can be significantly enhanced. Other proteins of interest include, but are not limited to, k-laminin, talin, integrin, kalinin, fibroblast growth factor (FGF), and TGF- β . By tethering a combination of corneal enhancer mols., a more natural environment can be created. Addnl., the surface topog. of the artificial surface, preferably a hydrogel, can be micro-molded, etched, lathed, or engineered prior to tethering the corneal enhancer mols. to resemble the natural underlying surface of the corneal epithelial cells, Bowman's layer. This system allows epithelial cells to spread and attach faster than existing systems, as well as providing an underlying textured surface that allows the cells to resist the shear force induced in vivo by the blinking of the eyelid. Moreover, the resulting epithelial layer closely resembles a natural epithelial layer. The material can be used, for example, as a corneal onlay, an epikeratophakia lenticule, an intracorneal augmentation device, or an artificial cornea. A base optical polymer 2-hydroxyethyl methacrylate-methacrylic acid hydrogel was prepared

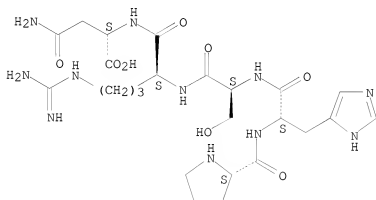
IT 158622-13-0
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(synthetic device for cornea augmentation and replacement that increases corneal epithelium cell adhesion and migration)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



L4 ANSWER 58 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:915029 CAPLUS

DOCUMENT NUMBER: 136:48471

TITLE: Peptide-based methods and compositions for wound healing

INVENTOR(S): Livant, Donna L.

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: U.S., 39 pp., Cont.-in-part of U.S. 5,840,514.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6331409	B1	20011218	US 2000-503998	20000214
US 5840514	A	19981124	US 1996-754322	19961121
US 5989850	A	19991123	US 1998-140047	19980826
US 20020068047	A1	20020606	US 2001-939481	20010824
US 6576440	B2	20030610		
US 20030203014	A1	20031030	US 2003-346927	20030117
US 6841355	B2	20050111		

PRIORITY APPLN. INFO.:

US 1996-754322	A2	19961121
US 1997-972760	A1	19971118
US 2000-503998	A1	20000214
US 2001-939481	A1	20010824

OTHER SOURCE(S): MARPAT 136:48471

AB Assays employing fibronectin-depleted substrates are described to identify invasion-inducing agents. Such agents are useful for in vivo wound healing, including but not limited to deep wounds and chronic wounds.

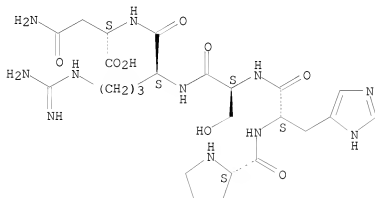
IT 158622-13-0
 RL: PAC (Pharmacological activity); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
 (peptide-based methods and compns. for wound healing)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



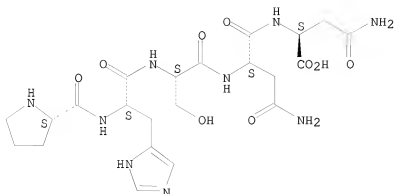
IT 252229-34-8 252229-40-6
 RL: PRP (Properties)
 (unclaimed sequence; peptide-based methods and compns. for wound healing)

RN 252229-34-8 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

Absolute stereochemistry.

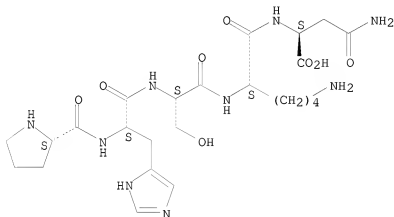


RN 252229-40-6 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.



REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 59 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:435986 CAPLUS

DOCUMENT NUMBER: 135:215873

TITLE: Adhesion of $\alpha 5 \beta 1$ receptors to biomimetic substrates constructed from peptide amphiphiles
Dillow, Angela K.; Ochsenhirt, Sarah E.; McCarthy, James B.; Fields, Gregg B.; Tirrell, Matthew
CORPORATE SOURCE: Department of Chemical Engineering and Materials Science, University of Minnesota, Minneapolis, MN, 55455, USA

SOURCE: Biomaterials (2001), 22(12), 1493-1505

CODEN: BIMADU; ISSN: 0142-9612

PUBLISHER: Elsevier Science Ltd.

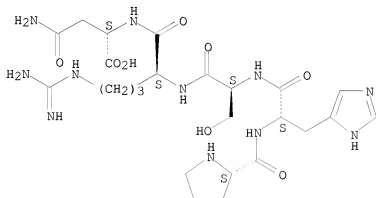
AB Biomimetic membrane surfaces functionalized with fragments of the extracellular matrix protein, fibronectin, are constructed from mixts. of peptide and polyethylene glycol (PEG) amphiphiles. Peptides from the primary binding loop, GRGDSP, were used in conjunction with the synergy site peptide, PHSRN, in the IIS9-10 sites of human fibronectin. These peptides were attached to dialkyl lipid tails to form peptide amphiphiles. PEG amphiphiles were mixed in the layer to minimize non-specific adhesion in the background. GRGDSP and PEG amphiphiles or GRGDSP, PHSRN, and PEG amphiphiles were mixed in various ratios and deposited on solid substrates from the air-water interface using Langmuir-Blodgett techniques. In this method, peptide composition, d., and presentation could be controlled accurately. The effectiveness of these substrates to mimic native fibronectin is evaluated by their ability to generate adhesive forces when they are in contact with purified activated $\alpha 5 \beta 1$ integrin receptors that are immobilized on an opposing surface. Adhesion is measured using a contact mech. approach (JKR experiment). The effects of membrane composition, d., temperature, and peptide conformation on adhesion to activated integrins in this simulated cell adhesion setup were determined. Addition of the synergy site, PHSRN, was found to increase adhesion of $\alpha 5 \beta 1$ to biomimetic substrates markedly. Increased peptide mobility (due to increased exptl. temperature) increased integrin adhesion markedly at low peptide concns. A balance between peptide d. and steric accessibility of the receptor binding face to $\alpha 5 \beta 1$ integrin was required for highest adhesion.

IT 158622-13-0D, C18-amphiphile
RL: BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(adhesion of $\alpha 5 \beta 1$ receptors to biomimetic substrates constructed from peptide amphiphiles)

RN 158622-13-0 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEO 1 PHSRN

Absolute stereochemistry.

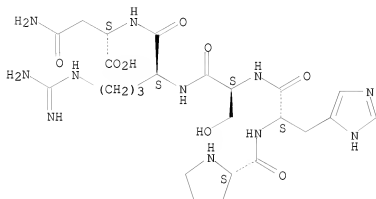


IT	158622-13-0	
	RL:	BSU (Biological study, unclassified); BIOL (Biological study) (adhesion of $\alpha 5 \beta 1$ receptors to biomimetic substrates constructed from peptide amphiphiles)
RN	158622-13-0	CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 60 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:402331 CAPLUS

DOCUMENT NUMBER: 135:293820

TITLE: Amino acids and peptides. Part 39: A bivalent poly(ethylene glycol) hybrid containing an active site (RGD) and its synergistic site (PHSRN) of fibronectin
AUTHOR(S): Hojo, K.; Susuki, Y.; Maeda, M.; Okazaki, I.; Nomizu, M.; Kamada, H.; Yamamoto, Y.; Nakagawa, S.; Mayumi, T.; Kawasaki, K.

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kobe Gakuin University, Kobe, Nishi-ku, Ikawadani-cho, 651-2180, Japan

SOURCE: Bioorganic & Medicinal Chemistry Letters (2001), 11(11), 1429-1432
CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Fibronectin contains the active sequence Arg-Gly-Asp (RGD), along with its synergic site Pro-His-Ser-Arg-Asn (PHSRN). However, the PHSRN peptide does not show synergic activity when it is mixed with the RGD peptide, indicating that a spatial array between RGD and PHSRN in fibronectin may be necessary for synergic activity. Here, we have used an amino acid type poly(ethylene glycol) derivative (aaPEG) to design a bivalent PEG hybrid of fibronectin active peptides. We prepared the aaPEG hybrid peptides PHSRN-aaPEG, aaPEG-RGD, and PHSRN-aaPEG-RGD, and tested their biol. activity. Whereas aaPEG-RGD promoted cell spreading activity, PHSRN-aaPEG had no activity. The PHSRN-aaPEG-RGD hybrid strongly promoted cell spreading compared with aaPEG-RGD. These results suggest that the PHSRN sequence in the PHSRN-aaPEG-RGD mol. synergistically enhances the cell spreading activity of the RGD sequence, and that the bivalent aaPEG hybrid method may be useful for conjugating functionally active peptides. Preparation and cell spreading activity of a fibronectin-related PEG hybrid are reported.

IT 158622-13-0

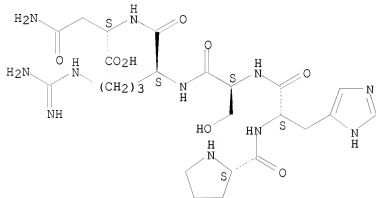
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(bivalent PEG hybrid containing an active site (RGD) and its synergistic
site (PHSRN) of fibronectin)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 61 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2001:311763 CAPLUS

DOCUMENT NUMBER: 135:61540

TITLE: A bivalent poly(ethylene glycol) hybrid containing an
active site (RGD) and a synergistic site of
fibronectin

AUTHOR(S): Susuki, Yuichi; Hojo, Keiko; Maeda, Mitsuko; Nomizu,
Motoyoshi; Okazaki, Ikuko; Nishi, Norio; Kamada,
Haruhiko; Yamamoto, Yoko; Nakagawa, Shinsaku; Mayumi,
Tadanori; Kawasaki, Koichi

CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Kobe Gakuin
University, Kobe, 651-2180, Japan

SOURCE: Peptide Science (2001), Volume Date 2000, 37th,
193-196

PUBLISHER: CODEN: PSCIFQ; ISSN: 1344-7661

DOCUMENT TYPE: Japanese Peptide Society

LANGUAGE: Journal

AB A symposium report. An active sequence of fibronectin, RGD, and its
synergistic site, PHSRN, were conjugated with an amino acid type
poly(ethylene glycol) (aaPEG) analog. PEG hybrids, aaPEG-RGD, PHSRN-PEG,
and PHSRN-aaPEG-RGD, were prepared by the solid phase method using an Fmoc
strategy. AaPEG-RGD showed cell spreading activity but PHSRN-PEG did not
promote cell adhesion. Cell spreading activity of PHSRN-aaPEG-RGD hybrid
was found to be more potent than that of PEG-RGD. These results suggested
that PHSRN sequence enhanced the cell spreading activity of RGD in the
PHSRN-aaPEG-RGD hybrid.

IT 345911-29-7P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological
study); PREP (Preparation)

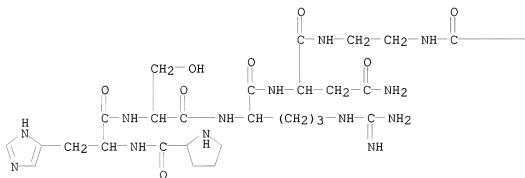
RN 345911-29-7 CAPLUS

```
NTE multichain
modified (modifications unspecified)
```

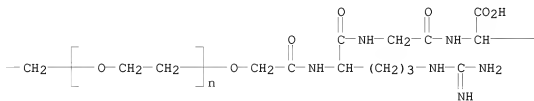
SEQ 1 PHSRN

1 RGD

PAGE 1-A



PAGE 1-B



PAGE 1-C



IT 345911-28-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

RN 345911-28-6 CAPLUS

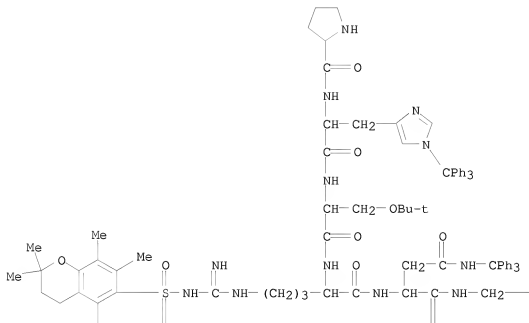
CN Poly(oxy-1,2-ethanediyl), α -hydro- ω -hydroxy-, monoether with
 L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(1,1-dimethylethyl)-L-seryl-N5-
 [[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-benzopyran-6-
 yl)sulfonyl]amino]iminomethyl]-L-ornithyl-N1-[2-
 [(hydroxyacetyl)amino]ethyl]-N4-(triphenylmethyl)-L-aspartamide, ether
 with hydroxyacetyl-N5-[[[(3,4-dihydro-2,2,5,7,8-pentamethyl-2H-1-
 benzopyran-6-yl)sulfonyl]amino]iminomethyl]-L-ornithylglycyl-L-aspartic
 acid 44-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)

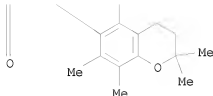
NTE multichain
 modified (modifications unspecified)

SEQ 1 PHSXN

1 XGD

PAGE 1-A





REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 62 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2001:64153 CAPLUS
 DOCUMENT NUMBER: 134:143575
 TITLE: Angiocidin: a tumor cell adhesion receptor binding to the CSVTCG motif of thrombospondins
 Tuszynski, George; Williams, Taffy
 INVENTOR(S): USA
 PATENT ASSIGNEE(S): PCT Int. Appl., 116 pp.
 SOURCE: CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001005968	A1	20010125	WO 2000-US16953	20000621
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
CA 2340721	A1	20010125	CA 2000-2340721	20000621
EP 1109900	A1	20010627	EP 2000-941579	20000621
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, MC, IE, SI, LT, LV, FI, RO			
JP 2004513066	T	20040430	JP 2001-511181	20000621
MX 2001PA01885	A	20020424	MX 2001-PA1885	20010221
US 20030180295	A1	20030925	US 2002-122348	20020416
PRIORITY APPLN. INFO.:			US 1999-140309P	P 19990621
			US 2000-176626P	P 20000119
			US 2000-597845	B3 20000620
			WO 2000-US16953	W 20000621

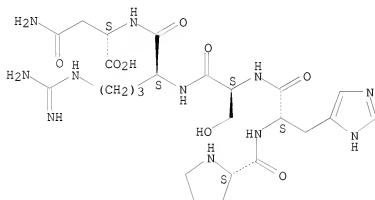
AB The present invention provides the sequence of a cell matrix receptor

specific for the Cys-Ser-Val-Thr-Cys-Gly (CSVTCG) region of thrombospondin. The interaction of thrombospondins and cell surfaces plays an important role in cell adhesion and tumor spread and so the receptor may be a target for treatment of certain types of proliferative disease. Also provided are purification, cloning and expression methods. The receptor protein is useful in numerous diagnostic, prophylactic and therapeutic areas. The receptor was purified from mouse melanoma cells by capture with immobilized CSVTCG peptide and antibodies raised against the protein were used to screen an expression library to obtain a cDNA. The protein was then manufactured by expression of the gene in *Escherichia coli* using a hexahistidine affinity label for rapid purification. Angiocidin is abundant in breast tumors and was an effective inhibitor of angiogenesis in vitro and can also reverse the formation of microvessels. It lowered the viability of aortic endothelial cells but had no effect on the viability of smooth muscle cells.

IT 158622-13-0
 RL: PRP (Properties)
 (unclaimed sequence; angiocidin, a tumor cell adhesion receptor binding to the CSVTCG motif of thrombospondins)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 63 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2001:61890 CAPLUS
 DOCUMENT NUMBER: 134:266546
 TITLE: Inhibition of Cell Adhesion to Fibronectin by Oligopeptide-Substituted Polynorbornenes
 AUTHOR(S): Maynard, Heather D.; Okada, Sheldon Y.; Grubbs, Robert H.
 CORPORATE SOURCE: Arnold and Mabel Beckman Laboratories of Chemical Synthesis Division of Chemistry and Chemical Engineering, California Institute of Technology, Pasadena, CA, 91125, USA
 SOURCE: Journal of the American Chemical Society (2001), 123(7), 1275-1279
 CODEN: JACSAT; ISSN: 0002-7863
 PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:266546

AB Polynorbornenes substituted with two different peptide sequences from the RGD-containing integrin cell-binding domain of fibronectin are potent inhibitors of human foreskin fibroblast cell adhesion to fibronectin-coated surfaces. Ring-opening metathesis polymerization (ROMP) using

Ru:CHPh(Cl)₂(PCy₃) as an initiator produced polymers substituted with GRGDS (GlyArgGlyAspSer) and PHSRN (ProHisSerArgAsn) peptide sequences. The inhibitory activity was quantified for these polymers and compared to the free peptides and GRGES (GlyArgGlyGluSer)-containing controls. A homopolymer substituted with GRGDS peptides was significantly more active than the free GRGDS peptide (IC₅₀ = 0.18 ± 0.03 and 1.33 ± 0.20 mM resp.), and the copolymer containing both GRGDS and PHSRN is the most potent inhibitor (IC₅₀ = 0.04 ± 0.01 mM). These results demonstrate that significant enhancements of observed biol. activity can be obtained from polymeric materials containing more than one type of multivalent ligand and that ROMP is a useful method to synthesize such well-defined copolymers.

IT 158622-13-0P

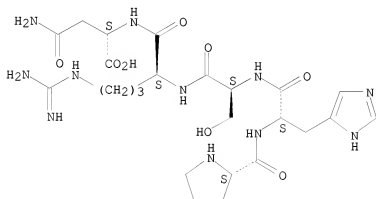
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(evaluation of free peptides as inhibitors of cellular adhesion to fibronectin-coated surfaces)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



IT 331640-86-9P 331640-93-8DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of norbornene-containing peptides for ring-opening metathesis polymerization)

RN 331640-86-9 CAPLUS

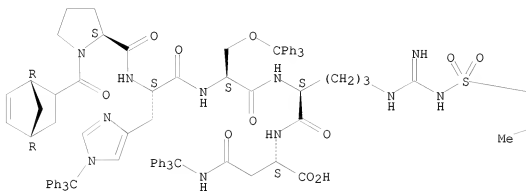
CN L-Asparagine, 1-[(1R,4R)-bicyclo[2.2.1]hept-5-en-2-ylcarbonyl]-L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(triphenylmethyl)-L-seryl-N₅-[[[(2,3-dihydro-2,2,4,6,7-pentamethyl-5-benzofuran-1-yl)sulfonyl]amino]iminomethyl]-L-ornithyl-N-(triphenylmethyl)- (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

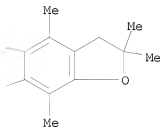
SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B

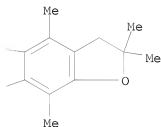
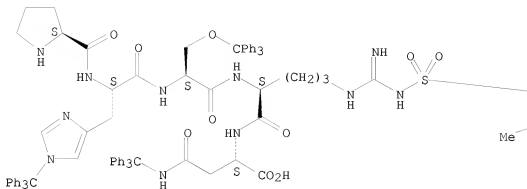


RN 331640-93-8 CAPLUS
 CN L-Asparagine, L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(triphenylmethyl)-
 L-seryl-N5-[[[(2,3-dihydro-2,2,4,6,7-pentamethyl-5-
 benzofuranyl)sulfonyl]amino]iminomethyl]-L-ornithyl-N-(triphenylmethyl)-
 (9CI) (CA INDEX NAME)

NTE modified (modifications unspecified)

SEQ 1 PHSRN

Absolute stereochemistry.



IT 331640-89-2DP, deprotected 331640-91-6DP, deprotected
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
 (preparation of peptide-substituted polymers, via ring-opening metathesis polymerization, as inhibitors of cellular adhesion to fibronectin-coated surfaces)

RN 331640-89-2 CAPLUS
 CN L-Asparagine, 1-[(1R,4R)-bicyclo[2.2.1]hept-5-en-2-ylcarbonyl]-L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(triphenylmethyl)-L-seryl-N5-[[[(2,3-dihydro-2,2,4,6,7-pentamethyl-5-benzofuranyl)sulfonyl]amino]iminomethyl]-L-ornithyl-N-(triphenylmethyl)-, homopolymer (9CI) (CA INDEX NAME)

NTE homopolymer
 modified (modifications unspecified)

SEQ 1 PHSRN

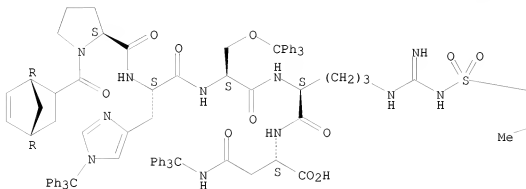
CM 1

CRN 331640-86-9
 CMF C102 H105 N11 O12 S

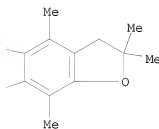
NTE modified (modifications unspecified)

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



RN	331640-91-6	CAPLUS
CN	L-Asparagine, 1-((1R,4R)-bicyclo[2.2.1]hept-5-en-2-ylcarboxonyl)-L-prolyl-1-(triphenylmethyl)-L-histidyl-O-(triphenylmethyl)-L-seryl-N5-[[[(2,3-dihydro-2,2,4,6,7-pentamethyl-5-benzofuranyl)sulfonyl]amino]iminomethyl]-L-ornithyl-N-(triphenylmethyl)-, polymer with N-((1R,4R)-bicyclo[2.2.1]hept-5-en-2-ylcarboxonyl)glycyl-N5-[[[(2,3-dihydro-2,2,4,6,7-pentamethyl-5-benzofuranyl)sulfonyl]amino]iminomethyl]-L-ornithylglycyl-L- α -aspartyl-O-(1,1-dimethylethyl)-L-serine 4-(1,1-dimethylethyl) ester (9CI) (CA INDEX NAME)	

NTE complex
modified (modifications unspecified)

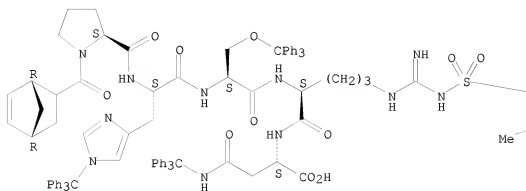
```
SEQ      1  PHSRN
          1  GXGDS
          1  PHSXN
```

CM 1

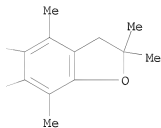
CRN 331640-86-9
 CMF C102 H105 N11 O12 S
 NTE modified (modifications unspecified)
 SEQ 1 PHSRN

Absolute stereochemistry.

PAGE 1-A

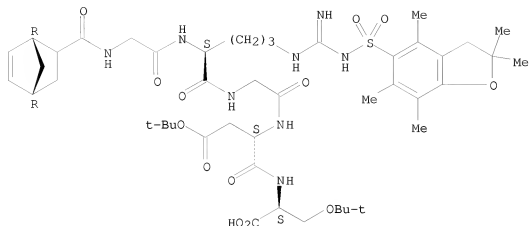


PAGE 1-B



CM 2
 CRN 331640-85-8
 CMF C46 H70 N8 O13 S
 NTE modified (modifications unspecified)
 SEQ 1 GRGDS

Absolute stereochemistry.



REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 64 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:824291 CAPLUS

DOCUMENT NUMBER: 134:21425

TITLE: Protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components

INVENTOR(S): Bridon, Dominique P.; Ezrin, Alan M.; Milner, Peter G.; Holmes, Darren L.; Thibaudeau, Karen

PATENT ASSIGNEE(S): Conjuchem, Inc., Can.

SOURCE: PCT Int. Appl., 733 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000069900	A2	20001123	WO 2000-US13576	20000517
WO 2000069900	A3	20010215		
WO 2000069900	A9	20020704		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2373252	A1	20001123	CA 2000-2373252	20000517
CA 2373252	C	20070807		
CA 2373680	A1	20001123	CA 2000-2373680	20000517
CA 2373680	C	20080729		
CA 2499211	A1	20001123	CA 2000-2499211	20000517
CA 2501421	A1	20001123	CA 2000-2501421	20000517
CA 2505617	A1	20001123	CA 2000-2505617	20000517
CA 2623458	A1	20001123	CA 2000-2623458	20000517
WO 2000070665	A2	20001123	WO 2000-IB763	20000517
WO 2000070665	A3	20010419		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU,				

	CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW		
RM:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG		
EP 1105409	A2	20010613	EP 2000-936023
EP 1105409	B1	20060301	20000517
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, CY		
EP 1171582	A2	20020116	EP 2000-929748
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO		20000517
EP 1264840	A1	20021211	EP 2002-14617
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL		20000517
JP 2003500341	T	20030107	JP 2000-619018
JP 2003508350	T	20030304	JP 2000-618316
AU 765753	B2	20030925	AU 2000-51393
EP 1591453	A1	20051102	EP 2005-105384
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL		20000517
CN 1698881	A	20051123	CN 2005-10005990
EP 1598365	A1	20051123	EP 2005-105387
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL		20000517
EP 1623994	A2	20060208	EP 2005-108328
EP 1623994	A3	20080716	20000517
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL		
AT 318835	T	20060315	AT 2000-936023
PT 1105409	T	20060731	PT 2000-936023
ES 2257298	T3	20060801	ES 2000-936023
CN 101289500	A	20081022	CN 2008-10091504
US 6849714	B1	20050201	US 2000-623548
US 6514500	B1	20030204	US 2000-657332
US 7090851	B1	20060815	US 2000-657336
US 7144854	B1	20061205	US 2000-657431
ZA 2001006676	A	20020719	ZA 2001-6676
ZA 2001009110	A	20020613	ZA 2001-9110
US 20030108567	A1	20030612	US 2002-287892
US 6821949	B2	20041123	
US 20030108568	A1	20030612	US 2002-288340
US 6887849	B2	20050503	20021104
US 20040127398	A1	20040701	US 2003-722733
US 20040138100	A1	20040715	US 2003-723099
US 20050176641	A1	20050811	US 2005-40810
US 20050176643	A1	20050811	US 2005-67556
JP 2005263807	A	20050929	JP 2005-115175
JP 2005239736	A	20050908	JP 2005-140407
JP 2005255689	A	20050922	JP 2005-151458
JP 4116016	B2	20080709	20050524
US 20060009377	A1	20060112	US 2005-170967
US 20060058235	A1	20060316	US 2005-215967
JP 2006151986	A	20060615	JP 2005-361126
US 20060135426	A1	20060622	US 2005-304446
US 20060135428	A1	20060622	US 2006-350703
US 20080194486	A1	20080814	US 2007-923222
US 20080199532	A1	20080821	US 2007-926843
JP 2008101021	A	20080501	JP 2007-325307
			20071217

JP 2008110986	A	20080515	JP 2008-8554	20080117
JP 2008150384	A	20080703	JP 2008-8555	20080117
PRIORITY APPLN. INFO.:			US 1999-134406P	P 19990517
			US 1999-153406P	P 19990910
			US 1999-159783P	P 19991015
			US 1999-134406	A 19990517
			US 1999-153406	A 19990910
			US 1999-159783	A 19991015
			CA 2000-2363712	A3 20000517
			CA 2000-2373680	A3 20000517
			CN 2000-807671	A3 20000517
			EP 2000-932570	A3 20000517
			EP 2000-936023	A3 20000517
			JP 2000-618316	A3 20000517
			JP 2000-618318	A3 20000517
			JP 2000-618327	A3 20000517
			JP 2000-619018	A3 20000517
			WO 2000-1B763	W 20000517
			WO 2000-US13576	W 20000517
			US 2000-623543	A1 20000905
			US 2000-623548	A1 20000905
			US 2000-657276	A2 20000907
			US 2000-657332	A3 20000907
			US 2000-657431	A1 20000907
			US 2002-400199P	P 20020731
			US 2002-400413P	P 20020731
			US 2002-288340	A1 20021104
			WO 2003-CA1097	W 20030729
			US 2003-471348	A1 20030908
			US 2003-722733	A1 20031125
			US 2005-40810	A2 20050121
			US 2005-67556	A1 20050225
			US 2005-170967	A1 20050629
			US 2005-215967	A1 20050830

AB A method for protecting a peptide from peptidase activity in vivo, the peptide being composed of between 2 and 50 amino acids and having a C-terminus and an N-terminus and a C-terminus amino acid and an N-terminus amino acid is described. In the first step of the method, the peptide is modified by attaching a reactive group to the C-terminus amino acid, to the N-terminus amino acid, or to an amino acid located between the N-terminus and the C-terminus, such that the modified peptide is capable of forming a covalent bond in vivo with a reactive functionality on a blood component. The solid phase peptide synthesis of a number of derivs. with 3-maleimidopropionic acid (3-MPA) is described. In the next step, a covalent bond is formed between the reactive group and a reactive functionality on a blood component to form a peptide-blood component conjugate, thereby protecting said peptide from peptidase activity. The final step of the method involves the analyzing of the stability of the peptide-blood component conjugate to assess the protection of the peptide from peptidase activity. Thus, the percentage of a K5 kringle peptide (Pro-Arg-Lys-Leu-Tyr-Asp-Lys-NH₂) conjugated to human serum albumin via MPA remained relatively constant through a 24-h plasma assay in contrast to unmodified K5 which decreased to 9% of the original amount of K5 in only 4 h in plasma.

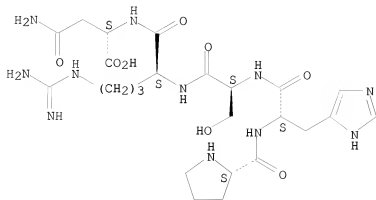
IT 158622-13-0 252229-85-9
RL: PRP (Properties)
(unclaimed sequence; protection of endogenous therapeutic peptides from peptidase activity through conjugation to blood components)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.

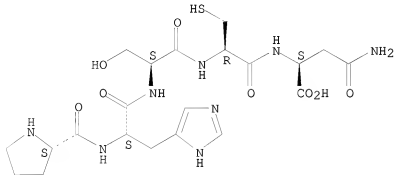


RN 252229-85-9 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

Absolute stereochemistry.



L4 ANSWER 65 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:391544 CAPLUS

DOCUMENT NUMBER: 133:118390

TITLE: The PHSRN sequence induces extracellular matrix invasion and accelerates wound healing in obese diabetic mice

AUTHOR(S): Livant, Donna L.; Brabec, R. Kaye; Kurachi, Kotoku; Allen, David L.; Wu, Yanling; Haaseth, Ronald; Andrews, Philip; Ethier, Stephen P.; Markwart, Sonja
CORPORATE SOURCE: Department of Cell and Developmental Biology, University of Michigan Medical School, Ann Arbor, MI, 48109-0616, USA

SOURCE: Journal of Clinical Investigation (2000), 105(11), 1537-1545

CODEN: JCINAO; ISSN: 0021-9738

PUBLISHER: American Society for Clinical Investigation

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The PHSRN sequence of the plasma fibronectin (pFn) cell-binding domain induces human keratinocytes and fibroblasts to invade the naturally serum-free extracellular matrixes of sea urchin embryos. The potency of acetylated, amidated PHSRN (Ac-PHSRN-NH₂) is significantly increased, making it more active on a molar basis than the 120-kDa cell-binding domain of pFn. Arginine is important to this activity because PHSAN and PHSEN are inactive, as is a randomized sequence peptide, Ac-HSPNR-NH₂. One treatment with Ac-PHSRN-NH₂ stimulates reepithelialization and contraction of dermal wounds in healing-impaired, obese diabetic C57BL/6KsJ db/db mice. Wound closure is equally rapid in treated db/db and db/+ mice and may be more rapid than in untreated nondiabetic db/+ littermates. In contrast, treatment with either Ac-HSPNR-NH₂ or normal saline (NS) has no effect. Anal. of sectioned db/db wounds shows that, in contrast to treatment with Ac-HSPNR-NH₂ or NS, a single Ac-PHSRN-NH₂ treatment stimulates keratinocyte and fibroblast migration into wounds, enhances fibroplasia and vascularization in the provisional matrix, and stimulates the formation of prominent fibers that may be associated with wound contraction.

IT 158622-13-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)

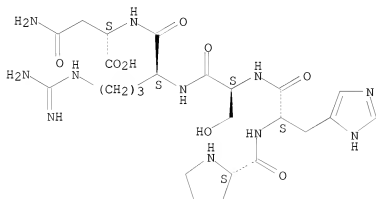
(PHSRN sequence induces extracellular matrix invasion and accelerates wound healing in obese diabetic mice)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 56 THERE ARE 56 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 66 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:304280 CAPLUS

DOCUMENT NUMBER: 132:330604

TITLE: A method of transducing mammalian cells, and products related thereto

INVENTOR(S): Malech, Harry L.

PATENT ASSIGNEE(S): United States of America, Department of Health and Human Services, USA

SOURCE: U.S., 19 pp.
CODEN: USXXAM

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6060317	A	20000509	US 1998-133033	19980811
PRIORITY APPLN. INFO.:			US 1998-133033	19980811

AB In accordance with the present invention, there are provided methods of transducing cells comprising providing a flexible closed culture container having cells therein and contacting said cells with a viral-vector in the presence of a multi-functional chemical moiety. Also provided are methods of delivering a functional protein to a subject in need thereof, comprising transducing mammalian cells according to the invention method and introducing said cells into a subject in need thereof. Also provided are cell-culture systems for transducing cells, comprising a flexible closed culture container and a multi-functional chemical moiety therein. In accordance with the present invention, there are provided methods of transducing cells comprising providing a flexible closed culture container having cells therein and contacting said cells with a viral-vector in the presence of a multi-functional chemical moiety. Also provided are methods of delivering a functional protein to a subject in need thereof, comprising transducing mammalian cells according to the invention method and introducing said cells into a subject in need thereof. Also provided are cell-culture systems for transducing cells, comprising a flexible closed culture container and a multi-functional chemical moiety therein.

IT 158622-13-0

RL: PRP (Properties)

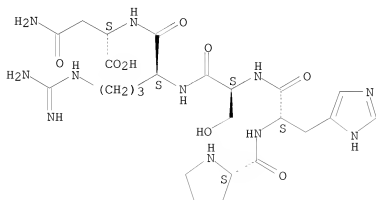
(unclaimed sequence; method of transducing mammalian cells, and products related thereto)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 46 THERE ARE 46 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 67 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 2000:114387 CAPLUS
 DOCUMENT NUMBER: 132:156889

TITLE: Dressings containing fibronectin-derived proteins and peptides for wound healing

INVENTOR(S): Livant, Donna L.

PATENT ASSIGNEE(S): The Regents of the University of Michigan, USA

SOURCE: U.S., 41 pp., Cont.-in-part of U.S. 5,840,514.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6025150	A	20000215	US 1997-972760	19971118
US 5840514	A	19981124	US 1996-754322	19961121
US 6140068	A	20001031	US 1998-89645	19980603
US 5989850	A	19991123	US 1998-140047	19980826
US 20020068047	A1	20020606	US 2001-939481	20010824
US 6576440	B2	20030610		
US 20030203014	A1	20031030	US 2003-346927	20030117
US 6841355	B2	20050111		

PRIORITY APPLN. INFO.:

US 1996-754322	A2	19961121
US 1997-972760	A1	19971118
US 2000-503998	A1	20000214
US 2001-939481	A1	20010824

AB Assays employing fibronectin-depleted substrates are described to identify invasion-inducing agents. Such agents are useful for in vivo wound healing, including but not limited to deep wounds and chronic wounds. For example, fibroblasts were induced to invade a SU-ECM substrate by PHSRN peptide at 10-3000 ng/mL in the presence or absence of serum. Also, a single application of the PHSRN peptide (2 µg) to the wound shortly after wounding stimulated wound healing in both normal and diabetic mice.

IT 158622-13-0 252229-34-8 252229-40-6

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); DEV (Device component use); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

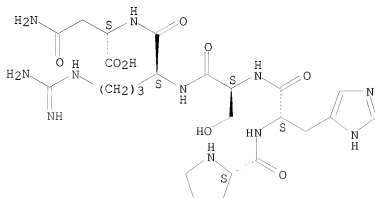
(dressings containing fibronectin-derived peptides lacking RGD motif for wound healing)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

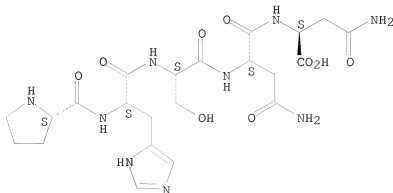
Absolute stereochemistry.



RN 252229-34-8 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

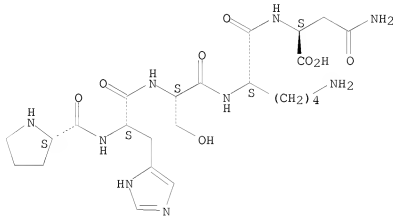
Absolute stereochemistry.



RN 252229-40-6 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

Absolute stereochemistry.



REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 68 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:102218 CAPLUS

DOCUMENT NUMBER: 132:245978

TITLE: Anti-invasive, antitumorigenic, and antimetastatic activities of the PHSNN sequence in prostate carcinoma
AUTHOR(S): Livant, Donna L.; Brabec, R. Kaye; Pienta, Kenneth J.; Allen, David L.; Kurachi, Kotoku; Markwart, Sonja;

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 69 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:5177 CAPLUS

DOCUMENT NUMBER: 132:136203

TITLE: Fine mapping of inhibitory anti- $\alpha 5$ monoclonal antibody epitopes that differentially affect integrin-ligand binding

AUTHOR(S): Burrows, Louise; Clark, Katherine; Mould, A. Paul; Humphries, Martin J.

CORPORATE SOURCE: Wellcome Trust Centre for Cell-Matrix Research, University of Manchester, Manchester, M13 9PT, UK

SOURCE: Biochemical Journal (1999), 344(2), 527-533

CODEN: BIJOAK; ISSN: 0264-6021

PUBLISHER: Portland Press Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The high-affinity interaction of integrin $\alpha 5 \beta 1$ with the central cell-binding domain of fibronectin requires both the Arg-Gly-Asp (RGD) sequence (in the tenth type III repeat) and a second site Pro-His-Ser-Arg-Asn (PHSRN) in the adjacent ninth type III repeat, which synergizes with RGD. Arg-Arg-Glu-Thr-Ala-Trp-Ala (RRETAWA) is a novel peptidic ligand for $\alpha 5 \beta 1$, identified by phage display, which blocks $\alpha 5 \beta 1$ -mediated cell adhesion to fibronectin. A key question is the location of the binding sites for these ligand sequences within the integrin. In this study we have identified residues that form part of the epitopes of three inhibitory anti- $\alpha 5$ monoclonal antibodies (mAbs): 16, P1D6 and SNAKA52. These mAbs have distinct functional properties. MAb 16 blocks the recognition of RGD and RRETAWA, whereas P1D6 blocks binding to the synergy sequence. The binding of SNAKA52 is inhibited by anti- $\beta 1$ mAbs, indicating that its epitope is close to the interface between the α and β subunits. Residues in human $\alpha 5$ were replaced with the corresponding residues in mouse $\alpha 5$ by site-directed mutagenesis; wild-type or mutant human $\alpha 5$ was expressed on the surface of $\alpha 5$ -deficient Chinese hamster ovary cells. MAb binding was assessed by flow cytometry and by adhesion to the central cell-binding domain of fibronectin or RRETAWA by cell attachment assay. All three epitopes were located to different putative loops in the N-terminal domain of $\alpha 5$. As expected, disruption of these epitopes had no effect on ligand recognition by $\alpha 5 \beta 1$. The locations of these epitopes are consistent with the β -propeller model for integrin α -subunit structure and allow us to propose a topol. image of the integrin-ligand complex.

IT 158622-13-0P

RL: BPN (Biosynthetic preparation); BPR (Biological process); BSU (Biological study, unclassified); PRP (Properties); BIOL (Biological study); PREP (Preparation); PROC (Process)

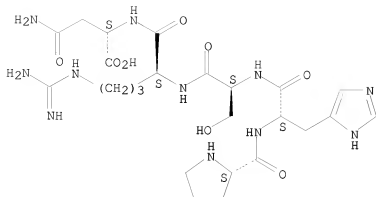
(fine mapping of inhibitory anti- $\alpha 5$ monoclonal antibody epitopes that differentially affect integrin-fibronectin ligand binding)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 70 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1999:794362 CAPLUS
 DOCUMENT NUMBER: 132:30820
 TITLE: Anticancer compounds and methods
 INVENTOR(S): Livant, Donna L.
 PATENT ASSIGNEE(S): Regents of the University of Michigan, USA
 SOURCE: U.S., 53 pp., Cont.-in-part of U. S. 5,840,514.
 CODEN: USXXAM
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 4
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6001965	A	19991214	US 1997-915189	19970820
US 5840514	A	19981124	US 1996-754322	19961121
CA 2264570	A1	19980528	CA 1997-2264570	19971120
WO 9822617	A1	19980528	WO 1997-US21674	19971120
W:	AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW			
RW:	GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG			
EP 928340	A1	19990714	EP 1997-949632	19971120
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
US 5989850	A	19991123	US 1998-140047	19980826
US 6472369	B1	20021029	US 1999-373694	19990813
AU 765126	B2	20030911	AU 2001-51984	20010618
US 20030083264	A1	20030501	US 2002-237850	20020909
US 7148196	B2	20061212		
AU 2003268832	A1	20040122	AU 2003-268832	20031211
			US 1996-754322	A2 19961121
			US 1997-915189	A 19970820
			WO 1997-US21674	W 19971120
			US 1999-373694	A3 19990813
			AU 2001-51984	A3 20010618

PRIORITY APPLN. INFO.:

OTHER SOURCE(S): MARPAT 132:30820

AB The testing of tumor cells, including human tumors capable of metastases, in assays employing fibronectin-depleted substrates is described. Ex vivo induction of cells, including biopsied human cells, is performed with invasion-inducing agents. Addnl., anti-cancer chemotherapeutics are described. Specifically, chemotherapeutic agents which have anti-metastatic and anti-growth properties are described.

IT 158622-13-0 252229-34-8 252229-40-6
252229-85-9 252230-05-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

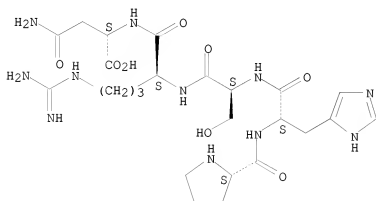
(antitumor peptides and inhibition of metastasis)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.

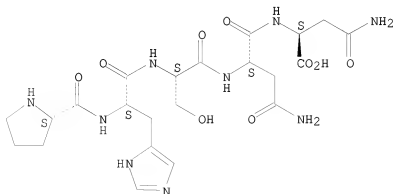


RN 252229-34-8 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-asparaginyl- (CA INDEX NAME)

SEQ 1 PHSNN

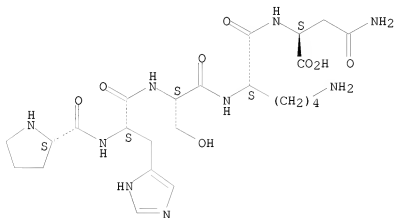
Absolute stereochemistry.



RN 252229-40-6 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-lysyl- (CA INDEX NAME)

SEQ 1 PHSKN

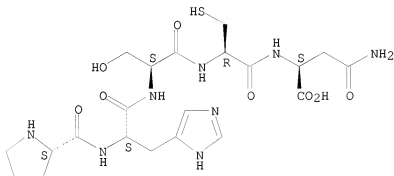
Absolute stereochemistry.



RN 252229-85-9 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-cysteinyl- (CA INDEX NAME)

SEQ 1 PHSCN

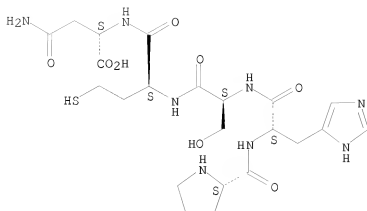
Absolute stereochemistry.



RN 252230-05-0 CAPLUS
CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-homocysteinyl- (9CI) (CA INDEX NAME)

SEQ 1 PHSXN

Absolute stereochemistry.



REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 71 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:742631 CAPLUS

DOCUMENT NUMBER: 132:98084

TITLE: Protein-mediated macrophage adhesion and activation on biomaterials: a model for modulating cell behavior
 AUTHOR(S): Kao, W. J.; Hubbell, J. A.; Anderson, J. M.
 CORPORATE SOURCE: School of Pharmacy and Department of Biomedical Engineering, University of Wisconsin at Madison, Madison, WI, 53706-1515, USA

SOURCE: Journal of Materials Science: Materials in Medicine (1999), 10(10/11), 601-605
 CODEN: JSMML; ISSN: 0957-4530

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The elucidation of proteins involved in biomaterial-modulated macrophage behavior is critical for the improvement of material performance and the initial exploration of material design capable of manipulating macrophage function for tissue engineering. Several in vitro and in vivo techniques are presented to demonstrate means of delineating a part of the complex mol. mechanisms involved in the interaction between biomaterial and macrophage adhesion and phenotypic development. RIA showed that complement component C3 was critical in mediating human macrophage adhesion on polyurethanes. The presence of a diphenolic antioxidant additive in polyurethanes increased the propensity for complement upregulation but did not affect adherent macrophage d. The s.c. cage-implant system was utilized to delineate interleukin-4 participation in the fusion of adherent macrophages to form foreign body giant cells in vivo in mice. Injection of purified interleukin-4-neutralizing antibody into the implanted cages decreased the giant cell d.; conversely, the giant cell d. was increased by injection of recombinant interleukin-4. The RGD and PHSRN amino acid sequences of the central cell-binding domain and the PRRARV sequence of the C-terminal heparin-binding domain of human plasma fibronectin were utilized to study the structure-function relations of proteins in mediating macrophage behavior. PEG-based networks grafted with the RGD-containing peptide supported higher adherent human macrophage d. than surfaces grafted with other peptides. Formation of foreign body giant cells was highly dependent on the relative orientation between PHSRN and RGD domains located in a single peptide.

IT 158622-13-0D, peptides containing

RL: BAC (Biological activity or effector, except adverse); BSU (Biological

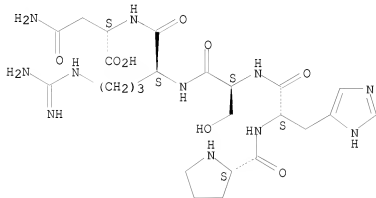
study, unclassified); BIOL (Biological study)
(protein-mediated macrophage adhesion and activation on biomaterials:
model for modulating cell behavior)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 72 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:722246 CAPLUS

DOCUMENT NUMBER: 132:270015

TITLE: Modulatory effect of the RGD and PHSRN amino acid sequences of fibronectin on macrophage adhesion and multinucleated giant cell formation

AUTHOR(S): Kao, W. J.; Hubbell, J. A.

CORPORATE SOURCE: School of Pharmacy and Biomedical Engineering,
University of Wisconsin at Madison, Madison, WI,
53706, USA

SOURCE: Proceedings of the International Symposium on
Controlled Release of Bioactive Materials (1999),
26th, 285-286

CODEN: PCRMEY; ISSN: 1022-0178

PUBLISHER: Controlled Release Society, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

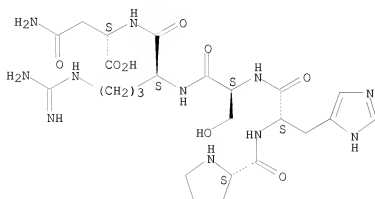
AB β 1-Integrin plays a key role in macrophage adhesion to all substrates, whereas β 3-integrins play an important but lesser role. Macrophages adhere to all substrates with rel. subtle differences between adhesion mediated by RGD, PHSRN, PRRARV, or combinations thereof. Macrophage adhesion to the heparin-binding PRRARV domain is mediated primarily by direct interaction with integrins, rather than by cell-surface heparin sulfate proteoglycan. The RGD sequence alone does not provide an adequate substrate for macrophage fusion to form FBGCs (foreign body giant cells). By contrast, the PHSRN synergistic site does provide a substrate that is permissive of FBGC formation. The PHSRN synergistic site together with the RGD site provides a substrate for FBGC formation that is comparable with that on pos. control material mediated by adsorbed proteins. This response is highly dependent upon the rel. orientation of the RGD and the PHSRN domains. The heparin-binding

sequence PRRARV seems to play no role in supporting FBGC formation. There is synergy between the RGD and the PHSRN domains in supporting macrophage fusion to form FBGCs, but not adhesion.

IT 158622-13-0
 RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
 (effect of the RGD and PHSRN amino acid sequences of fibronectin on macrophage adhesion and multinucleated giant cell formation)
 RN 158622-13-0 CAPLUS
 CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 73 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN
 ACCESSION NUMBER: 1999:549174 CAPLUS
 DOCUMENT NUMBER: 131:175085
 TITLE: Recombinant fibronectin-based extracellular matrix for wound healing
 INVENTOR(S): Clark, Richard A.; Greiling, Doris; Gailit, James
 PATENT ASSIGNEE(S): The Research Foundation of State University of New York, USA
 SOURCE: PCT Int. Appl., 48 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9942126	A1	19990826	WO 1999-US2873	19990210
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI,				

CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 5958874	A	19990928	US 1998-25706	19980218
CA 2321177	A1	19990826	CA 1999-2321177	19990210
CA 2321177	C	20060411		
AU 9932886	A	19990906	AU 1999-32886	19990210
AU 753816	B2	20021031		
EP 1061939	A1	20001227	EP 1999-934243	19990210

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

PRIORITY APPLN. INFO.: US 1998-25706 A 19980218
WO 1999-US2873 W 19990210

AB The invention provides an extracellular matrix for enhancing wound healing. The extracellular matrix comprises a recombinant fibronectin protein and a backbone matrix, wherein the recombinant fibronectin protein comprises peptides from two or more fibronectin domains. The extracellular matrix facilitates wound healing by providing hemostasis and, in addition, an environment that intrinsically recruits new tissue cells to the wound site. The extracellular matrix according to the subject invention is thus used in a method for enhancing wound healing. The method comprises applying the extracellular matrix to the wound.

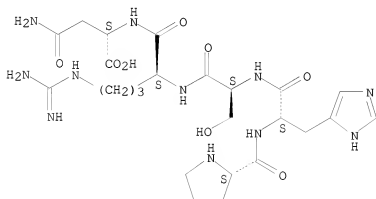
IT 158622-13-0
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(recombinant fibronectin-based extracellular matrix for wound healing)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 74 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1999:549165 CAPLUS

DOCUMENT NUMBER: 131:175083

TITLE: Hyaluronate-fibronectin peptide-based extracellular matrix for promotion of wound healing

INVENTOR(S): Clark, Richard A.; Greiling, Doris

PATENT ASSIGNEE(S): The Research Foundation of State University of New York, USA

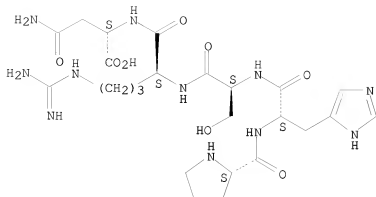
SOURCE: PCT Int. Appl., 43 pp.

DOCUMENT TYPE: CODEN: PIXXD2
 LANGUAGE: Patent
 FAMILY ACC. NUM. COUNT: 1 English
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9942117	A1	19990826	WO 1999-US2872	19990210
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6194378	B1	20010227	US 1998-25622	19980218
CA 2321933	A1	19990826	CA 1999-2321933	19990210
CA 2321933	C	20080722		
AU 9926690	A	19990906	AU 1999-26690	19990210
AU 751589	B2	20020822		
EP 1061933	A1	20001227	EP 1999-906882	19990210
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
PRIORITY APPLN. INFO.:			US 1998-25622	A 19980218
			WO 1999-US2872	W 19990210
AB	The invention provides an extracellular matrix for wound healing comprising peptides from two or more fibronectin domains in a backbone matrix. In one embodiment, the subject invention provides a hyaluronic acid backbone derivatized with the minimal fibronectin sequences that are optimal for tissue cell recruitment. These constructs can be used to accelerate the healing of acute gaping cutaneous wounds and chronic cutaneous ulcers. The invention thus further provides a method of enhancing wound healing which comprises applying the extracellular matrix to a wound.			
IT	158622-13-0D, derivs. RL: BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); PEP (Physical, engineering or chemical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses) (hyaluronate-fibronectin peptide-based extracellular matrix for promotion of wound healing)			
RN	158622-13-0 CAPLUS			
CN	L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)			

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 75 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1998:352968 CAPLUS

DOCUMENT NUMBER: 129:36439

ORIGINAL REFERENCE NO.: 129:7529a, 7532a

TITLE: Invasion-inducing agents and invasion-inhibitors for use in wound healing and cancer

INVENTOR(S): Livant, Donna L.

PATENT ASSIGNEE(S): Regents of the University of Michigan, USA; Livant, Donna L.

SOURCE: PCT Int. Appl., 93 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9822617	A1	19980528	WO 1997-US21674	19971120
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HG, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, KE, LS, MW, SD, SZ, UG, GB, GR, IE, IT, LU, MC, NL, GN, ML, MR, NE, SN, TD, TG			SI, AT, BE, CH, DE, DK, ES, FI, FR, PT, SE, BF, BJ, CF, CG, CI, CM, GA,	
US 5840514	A	19981124	US 1996-754322	19961121
US 6001965	A	19991214	US 1997-915189	19970820
CA 2264570	A1	19980528	CA 1997-2264570	19971120
AU 9873022	A	19980610	AU 1998-73022	19971120
EP 928340	A1	19990714	EP 1997-949632	19971120
R: AT, BE, CH, DE, DK, ES, FR, IE, SI, LT, LV, FI, RO			GB, GR, IT, LI, LU, NL, SE, MC, PT,	
AU 765126	B2	20030911	AU 2001-51984	20010618
AU 2003268832	A1	20040122	AU 2003-268832	20031211
RITY APPLN. INFO.:			US 1996-754322	A 19961121
			US 1997-915189	A2 19970820
			US 1997-925189	A 19970820
			WO 1997-US21674	W 19971120
			AU 2001-51984	A3 20010618

AB Wound healing-promoting and cancer-inhibiting compds. are described.

Specifically, therapeutic agents are disclosed which a) promote wound healing, or b) exhibit anti-metastatic and anti-growth properties. In addition, screening assays are provided for identifying addnl. therapeutic agents. The figure schematically shows the embodiment of the substrate (sea urchin embryo basement membranes) used according to the present invention for testing tumor cells.

IT 158622-13-0

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

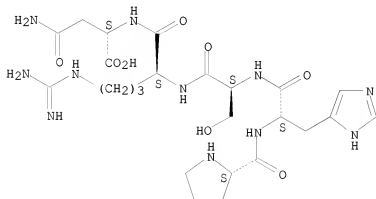
(invasion-inducing agents and invasion-inhibitors for use in wound healing and cancer)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 76 OF 76 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1994:648842 CAPLUS

DOCUMENT NUMBER: 121:248842

ORIGINAL REFERENCE NO.: 121:45311a, 45314a

TITLE: The short amino acid sequence Pro-His-Ser-Arg-Asn in human fibronectin enhances cell-adhesive function
Aota, Shinichi; Nomizu, Motoyoshi; Yamada, Kenneth M.
Lab. Developmental Biol., NIDR, Natl. Inst. Health,
Bethesda, MD, 20892, USA

SOURCE: Journal of Biological Chemistry (1994), 269(40),
24756-61

CODEN: JBCHA3; ISSN: 0021-9258

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Synergistic sites in the central cell-adhesive domain of fibronectin (FN) substantially enhance cell adhesion mediated by the $\alpha 5 \beta 1$ integrin receptor for fibronectin. The authors characterized a critical minimal sequence needed for synergistic activity using site-directed mutagenesis and homol. scanning using intramol. chimeras. The minimal cell-binding domain of FN consisting of the 9th and 10th type III FN repeat was expressed in an Escherichia coli expression system. This protein retained high biol. activity when assayed using a competitive

inhibition assay for FN-mediated adhesion of baby hamster kidney or HT-1080 cells. In contrast, a construct consisting of the 8th and 10th repeat displayed very low biol. activity. By replacing various portions of the 8th repeat with homologs 9th repeat segments, the authors mapped the synergistic region to the center of the 9th repeat. When a very short peptide sequence, Pro-His-Ser-Arg-Asn (PHSRN), from the 9th repeat was substituted for the homologs pentapeptide site in the 8th repeat sequence, the recombinant protein showed markedly enhanced activity. Further mutagenesis anal. suggested that the arginine residue of this pentapeptide sequence is important for function. The authors also identified a weaker adjacent synergy region other than the PHSRN region. Epitope mapping of an anti-FN monoclonal antibody that inhibits FN-mediated adhesion identified the same critical regions. A synthetic peptide containing the PHSRN sequence showed neither competitive inhibitory activity in solution nor synergy with a soluble RGD-containing peptide. However, when the same

synthetic

peptide was positioned via a covalent bond at the corresponding site of the normally inactive 8th repeat, it mediated an enhancement of adhesive activity. These results identify a pentapeptide site that synergistically enhances the cell-adhesive activity of the FN RGD sequence.

IT 158622-13-0

RL: BIOL (Biological study)

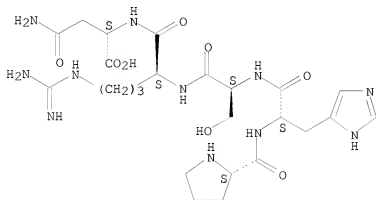
(of fibronectin of human, cell adhesion enhanced by)

RN 158622-13-0 CAPLUS

CN L-Asparagine, L-prolyl-L-histidyl-L-seryl-L-arginyl- (CA INDEX NAME)

SEQ 1 PHSRN

Absolute stereochemistry.



=> d his

(FILE 'HOME' ENTERED AT 17:56:05 ON 02 DEC 2008)

FILE 'REGISTRY' ENTERED AT 17:58:45 ON 02 DEC 2008

L1 47 PHSCN/SQSP AND SQL<6

FILE 'CAPLUS' ENTERED AT 17:59:11 ON 02 DEC 2008

L2 21 L1

FILE 'REGISTRY' ENTERED AT 18:01:22 ON 02 DEC 2008

L3 84 PHS.N/SQSP AND SQL=5

FILE 'CAPLUS' ENTERED AT 18:01:44 ON 02 DEC 2008

L4 76 L3
L5 76 DUP REM L4 (0 DUPLICATES REMOVED)

=> logoff h

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	797.56	1153.11
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-60.80	-94.40

SESSION WILL BE HELD FOR 120 MINUTES

STN INTERNATIONAL SESSION SUSPENDED AT 18:05:40 ON 02 DEC 2008